

SEQUENCE LISTING

<110> John P. Carulli et al.

<120> THE HIGH BONE MASS GENE OF 11q13.3

<130> 032796-014

<150> US 09/229,319

<151> 1999-01-13

<150> US 60/071,449

<151> 1998-01-13

<150> US 60/105,511

<151> 1998-10-23

<160> 62

<210> 1

<211> 5120

<212> DNA

<213> Homo sapiens

<400> 1

```

actaaagcgc cgccgcgcgc ccatggagcc cgagtgcgcg cggcgcgggc ccgtccggcc      60
gccggacaac  atg gag gca gcg ccg ccc ggg ccg ccg tgg ccg ctg ctg      109
          Met Glu Ala Ala Pro Pro Gly Pro Pro Trp Pro Leu Leu
          1              5              10

ctg ctg ctg ctg ctg ctg ctg gcg ctg tgc ggc tgc ccg gcc ccc gcc      157
Leu Leu Leu Leu Leu Leu Leu Ala Leu Cys Gly Cys Pro Ala Pro Ala
          15              20              25

gcg gcc tcg ccg ctc ctg cta ttt gcc aac cgc cgg gac gta cgg ctg      205
Ala Ala Ser Pro Leu Leu Leu Phe Ala Asn Arg Arg Asp Val Arg Leu
          30              35              40              45

```

gtg gac gcc ggc gga gtc aag ctg gag tcc acc atc gtg gtc agc ggc	253
Val Asp Ala Gly Gly Val Lys Leu Glu Ser Thr Ile Val Val Ser Gly	
50 55 60	
ctg gag gat gcg gcc gca gtg gac ttc cag ttt tcc aag gga gcc gtg	301
Leu Glu Asp Ala Ala Ala Val Asp Phe Gln Phe Ser Lys Gly Ala Val	
65 70 75	
tac tgg aca gac gtg agc gag gag gcc atc aag cag acc tac ctg aac	349
Tyr Trp Thr Asp Val Ser Glu Glu Ala Ile Lys Gln Thr Tyr Leu Asn	
80 85 90	
cag acg ggg gcc gcc gtg cag aac gtg gtc atc tcc ggc ctg gtc tct	397
Gln Thr Gly Ala Ala Val Gln Asn Val Val Ile Ser Gly Leu Val Ser	
95 100 105	
ccc gac ggc ctc gcc tgc gac tgg gtg ggc aag aag ctg tac tgg acg	445
Pro Asp Gly Leu Ala Cys Asp Trp Val Gly Lys Lys Leu Tyr Trp Thr	
110 115 120 125	
gac tca gag acc aac cgc atc gag gtg gcc aac ctc aat ggc aca tcc	493
Asp Ser Glu Thr Asn Arg Ile Glu Val Ala Asn Leu Asn Gly Thr Ser	
130 135 140	
cgg aag gtg ctc ttc tgg cag gac ctt gac cag ccg agg gcc atc gcc	541
Arg Lys Val Leu Phe Trp Gln Asp Leu Asp Gln Pro Arg Ala Ile Ala	
145 150 155	
ttg gac ccc gct cac ggg tac atg tac tgg aca gac tgg ggt gag acg	589
Leu Asp Pro Ala His Gly Tyr Met Tyr Trp Thr Asp Trp Gly Glu Thr	
160 165 170	
ccc cgg att gag cgg gca ggg atg gat ggc agc acc cgg aag atc att	637
Pro Arg Ile Glu Arg Ala Gly Met Asp Gly Ser Thr Arg Lys Ile Ile	
175 180 185	
gtg gac tcg gac att tac tgg ccc aat gga ctg acc atc gac ctg gag	685
Val Asp Ser Asp Ile Tyr Trp Pro Asn Gly Leu Thr Ile Asp Leu Glu	

190	195	200	205	
gag cag aag ctc tac tgg gct gac gcc aag ctc agc ttc atc cac cgt				733
Glu Gln Lys Leu Tyr Trp Ala Asp Ala Lys Leu Ser Phe Ile His Arg				
210	215	220		
gcc aac ctg gac ggc tgc ttc cgg cag aag gtg gtg gag ggc agc ctg				781
Ala Asn Leu Asp Gly Ser Phe Arg Gln Lys Val Val Glu Gly Ser Leu				
225	230	235		
acg cac ccc ttc gcc ctg acg ctc tcc ggg gac act ctg tac tgg aca				829
Thr His Pro Phe Ala Leu Thr Leu Ser Gly Asp Thr Leu Tyr Trp Thr				
240	245	250		
gac tgg cag acc cgc tcc atc cat gcc tgc aac aag cgc act ggg ggg				877
Asp Trp Gln Thr Arg Ser Ile His Ala Cys Asn Lys Arg Thr Gly Gly				
255	260	265		
aag agg aag gag atc ctg agt gcc ctc tac tca ccc atg gac atc cag				925
Lys Arg Lys Glu Ile Leu Ser Ala Leu Tyr Ser Pro Met Asp Ile Gln				
270	275	280	285	
gtg ctg agc cag gag cgg cag cct ttc ttc cac act cgc tgt gag gag				973
Val Leu Ser Gln Glu Arg Gln Pro Phe Phe His Thr Arg Cys Glu Glu				
290	295	300		
gac aat ggc ggc tgc tcc cac ctg tgc ctg ctg tcc cca agc gag cct				1021
Asp Asn Gly Gly Cys Ser His Leu Cys Leu Leu Ser Pro Ser Glu Pro				
305	310	315		
ttc tac aca tgc gcc tgc ccc acg ggt gtg cag ctg cag gac aac ggc				1069
Phe Tyr Thr Cys Ala Cys Pro Thr Gly Val Gln Leu Gln Asp Asn Gly				
320	325	330		
agg acg tgt aag gca gga gcc gag gag gtg ctg ctg ctg gcc cgg cgg				1117
Arg Thr Cys Lys Ala Gly Ala Glu Glu Val Leu Leu Leu Ala Arg Arg				
335	340	345		
acg gac cta cgg agg atc tgc ctg gac acg ccg gac ttc acc gac atc				1165

[illegible]

ctg gac ctg cag gag ggg aag ctc tac tgg gga gac gcc aag aca gac	1645
Leu Asp Leu Gln Glu Gly Lys Leu Tyr Trp Gly Asp Ala Lys Thr Asp	
510 515 520 525	
aag atc gag gtg atc aat gtt gat ggg acg aag agg cgg acc ctc ctg	1693
Lys Ile Glu Val Ile Asn Val Asp Gly Thr Lys Arg Arg Thr Leu Leu	
530 535 540	
gag gac aag ctc ccg cac att ttc ggg ttc acg ctg ctg ggg gac ttc	1741
Glu Asp Lys Leu Pro His Ile Phe Gly Phe Thr Leu Leu Gly Asp Phe	
545 550 555	
atc tac tgg act gac tgg cag cgc cgc agc atc gag cgg gtg cac aag	1789
Ile Tyr Trp Thr Asp Trp Gln Arg Arg Ser Ile Glu Arg Val His Lys	
560 565 570	
gtc aag gcc agc cgg gac gtc atc att gac cag ctg ccc gac ctg atg	1837
Val Lys Ala Ser Arg Asp Val Ile Ile Asp Gln Leu Pro Asp Leu Met	
575 580 585	
ggg ctc aaa gct gtg aat gtg gcc aag gtc gtc gga acc aac ccg tgt	1885
Gly Leu Lys Ala Val Asn Val Ala Lys Val Val Gly Thr Asn Pro Cys	
590 595 600 605	
gcg gac agg aac ggg ggg tgc agc cac ctg tgc ttc ttc aca ccc cac	1933
Ala Asp Arg Asn Gly Gly Cys Ser His Leu Cys Phe Phe Thr Pro His	
610 615 620	
gca acc cgg tgt ggc tgc ccc atc ggc ctg gag ctg ctg agt gac atg	1981
Ala Thr Arg Cys Gly Cys Pro Ile Gly Leu Glu Leu Leu Ser Asp Met	
625 630 635	
aag acc tgc atc gtg cct gag gcc ttc ttg gtc ttc acc agc aga gcc	2029
Lys Thr Cys Ile Val Pro Glu Ala Phe Leu Val Phe Thr Ser Arg Ala	
640 645 650	
gcc atc cac agg atc tcc ctc gag acc aat aac aac gac gtg gcc atc	2077
Ala Ile His Arg Ile Ser Leu Glu Thr Asn Asn Asn Asp Val Ala Ile	

655	660	665	
ccg ctc acg ggc gtc aag gag gcc tca gcc ctg gac ttt gat gtg tcc			2125
Pro Leu Thr Gly Val Lys Glu Ala Ser Ala Leu Asp Phe Asp Val Ser			
670	675	680	685
aac aac cac atc tac tgg aca gac gtc agc ctg aag acc atc agc cgc			2173
Asn Asn His Ile Tyr Trp Thr Asp Val Ser Leu Lys Thr Ile Ser Arg			
690	695	700	
gcc ttc atg aac ggg agc tcg gtg gag cac gtg gtg gag ttt ggc ctt			2221
Ala Phe Met Asn Gly Ser Ser Val Glu His Val Val Glu Phe Gly Leu			
705	710	715	
gac tac ccc gag ggc atg gcc gtt gac tgg atg ggc aag aac ctc tac			2269
Asp Tyr Pro Glu Gly Met Ala Val Asp Trp Met Gly Lys Asn Leu Tyr			
720	725	730	
tgg gcc gac act ggg acc aac aga atc gaa gtg gcg cgg ctg gac ggg			2317
Trp Ala Asp Thr Gly Thr Asn Arg Ile Glu Val Ala Arg Leu Asp Gly			
735	740	745	
cag ttc cgg caa gtc ctc gtg tgg agg gac ttg gac aac ccg agg tcg			2365
Gln Phe Arg Gln Val Leu Val Trp Arg Asp Leu Asp Asn Pro Arg Ser			
750	755	760	765
ctg gcc ctg gat ccc acc aag ggc tac atc tac tgg acc gag tgg ggc			2413
Leu Ala Leu Asp Pro Thr Lys Gly Tyr Ile Tyr Trp Thr Glu Trp Gly			
770	775	780	
ggc aag ccg agg atc gtg cgg gcc ttc atg gac ggg acc aac tgc atg			2461
Gly Lys Pro Arg Ile Val Arg Ala Phe Met Asp Gly Thr Asn Cys Met			
785	790	795	
acg ctg gtg gac aag gtg ggc cgg gcc aac gac ctc acc att gac tac			2509
Thr Leu Val Asp Lys Val Gly Arg Ala Asn Asp Leu Thr Ile Asp Tyr			
800	805	810	
gct gac cag cgc ctc tac tgg acc gac ctg gac acc aac atg atc gag			2557

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	112	114	116	118	120	122	124	126	128	130	132	134	136	138	140	142	144	146	148	150	152	154	156	158	160	162	164	166	168	170	172	174	176	178	180	182	184	186	188	190	192	194	196	198	200
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159	162	165	168	171	174	177	180	183	186	189	192	195	198	201	204	207	210	213	216	219	222	225	228	231	234	237	240	243	246	249	252	255	258	261	264	267	270	273	276	279	282	285	288	291	294	297	300
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	104	108	112	116	120	124	128	132	136	140	144	148	152	156	160	164	168	172	176	180	184	188	192	196	200	204	208	212	216	220	224	228	232	236	240	244	248	252	256	260	264	268	272	276	280	284	288	292	296	300	304	308	312	316	320	324	328	332	336	340	344	348	352	356	360	364	368	372	376	380	384	388	392	396	400
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	225	23																																																						

cat gga ctg agg aac gtc aaa gcc atc gac tat gac cca ctg gac aag	3037
His Gly Leu Arg Asn Val Lys Ala Ile Asp Tyr Asp Pro Leu Asp Lys	
975 980 985	
ttc atc tac tgg gtg gat ggg cgc cag aac atc aag cga gcc aag gac	3085
Phe Ile Tyr Trp Val Asp Gly Arg Gln Asn Ile Lys Arg Ala Lys Asp	
990 995 1000 1005	
gac ggg acc cag ccc ttt gtt ttg acc tct ctg agc caa ggc caa aac	3133
Asp Gly Thr Gln Pro Phe Val Leu Thr Ser Leu Ser Gln Gly Gln Asn	
1010 1015 1020	
cca gac agg cag ccc cac gac ctc agc atc gac atc tac agc cgg aca	3181
Pro Asp Arg Gln Pro His Asp Leu Ser Ile Asp Ile Tyr Ser Arg Thr	
1025 1030 1035	
ctg ttc tgg acg tgc gag gcc acc aat acc atc aac gtc cac agg ctg	3229
Leu Phe Trp Thr Cys Glu Ala Thr Asn Thr Ile Asn Val His Arg Leu	
1040 1045 1050	
agc ggg gaa gcc atg ggg gtg gtg ctg cgt ggg gac cgc gac aag ccc	3277
Ser Gly Glu Ala Met Gly Val Val Leu Arg Gly Asp Arg Asp Lys Pro	
1055 1060 1065	
agg gcc atc gtc gtc aac gcg gag cga ggg tac ctg tac ttc acc aac	3325
Arg Ala Ile Val Val Asn Ala Glu Arg Gly Tyr Leu Tyr Phe Thr Asn	
1070 1075 1080 1085	
atg cag gac cgg gca gcc aag atc gaa cgc gca gcc ctg gac ggc acc	3373
Met Gln Asp Arg Ala Ala Lys Ile Glu Arg Ala Ala Leu Asp Gly Thr	
1090 1095 1100	
gag cgc gag gtc ctc ttc acc acc ggc ctc atc cgc cct gtg gcc ctg	3421
Glu Arg Glu Val Leu Phe Thr Thr Gly Leu Ile Arg Pro Val Ala Leu	
1105 1110 1115	
gtg gtg gac aac aca ctg ggc aag ctg ttc tgg gtg gac gcg gac ctg	3469
Val Val Asp Asn Thr Leu Gly Lys Leu Phe Trp Val Asp Ala Asp Leu	

1120	1125	1130	
aag cgc att gag agc tgt gac ctg tca ggg gcc aac cgc ctg acc ctg			3517
Lys Arg Ile Glu Ser Cys Asp Leu Ser Gly Ala Asn Arg Leu Thr Leu			
1135	1140	1145	
gag gac gcc aac atc gtg cag cct ctg ggc ctg acc atc ctt ggc aag			3565
Glu Asp Ala Asn Ile Val Gln Pro Leu Gly Leu Thr Ile Leu Gly Lys			
1150	1155	1160	1165
cat ctc tac tgg atc gac cgc cag cag cag atg atc gag cgt gtg gag			3613
His Leu Tyr Trp Ile Asp Arg Gln Gln Gln Met Ile Glu Arg Val Glu			
	1170	1175	1180
aag acc acc ggg gac aag cgg act cgc atc cag ggc cgt gtc gcc cac			3661
Lys Thr Thr Gly Asp Lys Arg Thr Arg Ile Gln Gly Arg Val Ala His			
	1185	1190	1195
ctc act ggc atc cat gca gtg gag gaa gtc agc ctg gag gag ttc tca			3709
Leu Thr Gly Ile His Ala Val Glu Glu Val Ser Leu Glu Glu Phe Ser			
	1200	1205	1210
gcc cac cca tgt gcc cgt gac aat ggt ggc tgc tcc cac atc tgt att			3757
Ala His Pro Cys Ala Arg Asp Asn Gly Gly Cys Ser His Ile Cys Ile			
	1215	1220	1225
gcc aag ggt gat ggg aca cca cgg tgc tca tgc cca gtc cac ctc gtg			3805
Ala Lys Gly Asp Gly Thr Pro Arg Cys Ser Cys Pro Val His Leu Val			
	1230	1235	1240
ctc ctg cag aac ctg ctg acc tgt gga gag ccg ccc acc tgc tcc ccg			3853
Leu Leu Gln Asn Leu Leu Thr Cys Gly Glu Pro Pro Thr Cys Ser Pro			
	1250	1255	1260
gac cag ttt gca tgt gcc aca ggg gag atc gac tgt atc ccc ggg gcc			3901
Asp Gln Phe Ala Cys Ala Thr Gly Glu Ile Asp Cys Ile Pro Gly Ala			
	1265	1270	1275
tgg cgc tgt gac ggc ttt ccc gag tgc gat gac cag agc gac gag gag			3949

Trp Arg Cys Asp Gly Phe Pro Glu Cys Asp Asp Gln Ser Asp Glu Glu	
1280	1285
ggc tgc ccc gtg tgc tcc gcc gcc cag ttc ccc tgc gcg cgg ggt cag	3997
Gly Cys Pro Val Cys Ser Ala Ala Gln Phe Pro Cys Ala Arg Gly Gln	
1295	1300
tgt gtg gac ctg cgc ctg cgc tgc gac ggc gag gca gac tgt cag gac	4045
Cys Val Asp Leu Arg Leu Arg Cys Asp Gly Glu Ala Asp Cys Gln Asp	
1310	1315
cgc tca gac gag gtg gac tgt gac gcc atc tgc ctg ccc aac cag ttc	4093
Arg Ser Asp Glu Val Asp Cys Asp Ala Ile Cys Leu Pro Asn Gln Phe	
1330	1335
cgg tgt gcg agc ggc cag tgt gtc ctc atc aaa cag cag tgc gac tcc	4141
Arg Cys Ala Ser Gly Gln Cys Val Leu Ile Lys Gln Gln Cys Asp Ser	
1345	1350
ttc ccc gac tgt atc gac ggc tcc gac gag ctc atg tgt gaa atc acc	4189
Phe Pro Asp Cys Ile Asp Gly Ser Asp Glu Leu Met Cys Glu Ile Thr	
1360	1365
aag ccg ccc tca gac gac agc ccg gcc cac agc agt gcc atc ggg ccc	4237
Lys Pro Pro Ser Asp Asp Ser Pro Ala His Ser Ser Ala Ile Gly Pro	
1375	1380
gtc att ggc atc atc ctc tct ctc ttc gtc atg ggt ggt gtc tat ttt	4285
Val Ile Gly Ile Ile Leu Ser Leu Phe Val Met Gly Gly Val Tyr Phe	
1390	1395
gtg tgc cag cgc gtg gtg tgc cag cgc tat gcg ggg gcc aac ggg ccc	4333
Val Cys Gln Arg Val Val Cys Gln Arg Tyr Ala Gly Ala Asn Gly Pro	
1410	1415
ttc ccg cac gag tat gtc agc ggg acc ccg cac gtg ccc ctc aat ttc	4381
Phe Pro His Glu Tyr Val Ser Gly Thr Pro His Val Pro Leu Asn Phe	
1425	1430
	1435

ata gcc ccg ggc ggt tcc cag cat ggc ccc ttc aca ggc atc gca tgc	4429
Ile Ala Pro Gly Gly Ser Gln His Gly Pro Phe Thr Gly Ile Ala Cys	
1440 1445 1450	
gga aag tcc atg atg agc tcc gtg agc ctg atg ggg ggc cgg ggc ggg	4477
Gly Lys Ser Met Met Ser Ser Val Ser Leu Met Gly Gly Arg Gly Gly	
1455 1460 1465	
gtg ccc ctc tac gac cgg aac cac gtc aca ggg gcc tcg tcc agc agc	4525
Val Pro Leu Tyr Asp Arg Asn His Val Thr Gly Ala Ser Ser Ser Ser	
1470 1475 1480 1485	
tcg tcc agc acg aag gcc acg ctg tac ccg ccg atc ctg aac ccg ccg	4573
Ser Ser Ser Thr Lys Ala Thr Leu Tyr Pro Pro Ile Leu Asn Pro Pro	
1490 1495 1500	
ccc tcc ccg gcc acg gac ccc tcc ctg tac aac atg gac atg ttc tac	4621
Pro Ser Pro Ala Thr Asp Pro Ser Leu Tyr Asn Met Asp Met Phe Tyr	
1505 1510 1515	
tct tca aac att ccg gcc act gcg aga ccg tac agg ccc tac atc att	4669
Ser Ser Asn Ile Pro Ala Thr Ala Arg Pro Tyr Arg Pro Tyr Ile Ile	
1520 1525 1530	
cga gga atg gcg ccc ccg acg acg ccc tgc agc acc gac gtg tgt gac	4717
Arg Gly Met Ala Pro Pro Thr Thr Pro Cys Ser Thr Asp Val Cys Asp	
1535 1540 1545	
agc gac tac agc gcc agc cgc tgg aag gcc agc aag tac tac ctg gat	4765
Ser Asp Tyr Ser Ala Ser Arg Trp Lys Ala Ser Lys Tyr Tyr Leu Asp	
1550 1555 1560 1565	
ttg aac tcg gac tca gac ccc tat cca ccc cca ccc acg ccc cac agc	4813
Leu Asn Ser Asp Ser Asp Pro Tyr Pro Pro Pro Thr Pro His Ser	
1570 1575 1580	
cag tac ctg tcg gcg gag gac agc tgc ccg ccc tcg ccc gcc acc gag	4861
Gln Tyr Leu Ser Ala Glu Asp Ser Cys Pro Pro Ser Pro Ala Thr Glu	

1585	1590	1595	
agg agc tac ttc cat ctc ttc ccg ccc cct ccg tcc ccc tgc acg gac			4909
Arg Ser Tyr Phe His Leu Phe Pro Pro Pro Pro Ser Pro Cys Thr Asp			
1600	1605	1610	
tca tcc tgacctcggc cgggccactc tggcttctct gtgccccctgt aaatagtttt			4965
Ser Ser			
1615			
aaatatgaac aaagaaaaaa atatatttta tgatttaaaa aataaatata attgggattt			5025
taaaaacatg agaaatgtga actgtgatgg ggtgggcagg gctgggagaa ctttgtacag			5085
tggagaaata ttataaaact taattttgta aaaca			5120
<210> 2			
<211> 5120			
<212> DNA			
<213> Homo sapiens			
<400> 2			
actaaagcgc cgccgccgcg ccatggagcc cgagtgcgcg cggcgcgggc ccgtccggcc			60
gccggacaac atg gag gca gcg ccg ccc ggg ccg ccg tgg ccg ctg ctg			109
Met Glu Ala Ala Pro Pro Gly Pro Pro Trp Pro Leu Leu			
1	5	10	
ctg ctg ctg ctg ctg ctg gcg ctg tgc ggc tgc ccg gcc ccc gcc			157
Leu Leu Leu Leu Leu Leu Leu Ala Leu Cys Gly Cys Pro Ala Pro Ala			
15	20	25	
gcg gcc tcg ccg ctc ctg cta ttt gcc aac cgc cgg gac gta cgg ctg			205
Ala Ala Ser Pro Leu Leu Leu Phe Ala Asn Arg Arg Asp Val Arg Leu			
30	35	40	45
gtg gac gcc ggc gga gtc aag ctg gag tcc acc atc gtg gtc agc ggc			253
Val Asp Ala Gly Gly Val Lys Leu Glu Ser Thr Ile Val Val Ser Gly			

50	55	60	
ctg gag gat gcg gcc gca gtg gac ttc cag ttt tcc aag gga gcc gtg			301
Leu Glu Asp Ala Ala Ala Val Asp Phe Gln Phe Ser Lys Gly Ala Val			
65	70	75	
tac tgg aca gac gtg agc gag gag gcc atc aag cag acc tac ctg aac			349
Tyr Trp Thr Asp Val Ser Glu Glu Ala Ile Lys Gln Thr Tyr Leu Asn			
80	85	90	
cag acg ggg gcc gcc gtg cag aac gtg gtc atc tcc ggc ctg gtc tct			397
Gln Thr Gly Ala Ala Val Gln Asn Val Val Ile Ser Gly Leu Val Ser			
95	100	105	
ccc gac ggc ctc gcc tgc gac tgg gtg ggc aag aag ctg tac tgg acg			445
Pro Asp Gly Leu Ala Cys Asp Trp Val Gly Lys Lys Leu Tyr Trp Thr			
110	115	120	125
gac tca gag acc aac cgc atc gag gtg gcc aac ctc aat ggc aca tcc			493
Asp Ser Glu Thr Asn Arg Ile Glu Val Ala Asn Leu Asn Gly Thr Ser			
130	135	140	
cgg aag gtg ctc ttc tgg cag gac ctt gac cag ccg agg gcc atc gcc			541
Arg Lys Val Leu Phe Trp Gln Asp Leu Asp Gln Pro Arg Ala Ile Ala			
145	150	155	
ttg gac ccc gct cac ggg tac atg tac tgg aca gac tgg gtt gag acg			589
Leu Asp Pro Ala His Gly Tyr Met Tyr Trp Thr Asp Trp Val Glu Thr			
160	165	170	
ccc cgg att gag cgg gca ggg atg gat ggc agc acc cgg aag atc att			637
Pro Arg Ile Glu Arg Ala Gly Met Asp Gly Ser Thr Arg Lys Ile Ile			
175	180	185	
gtg gac tcg gac att tac tgg ccc aat gga ctg acc atc gac ctg gag			685
Val Asp Ser Asp Ile Tyr Trp Pro Asn Gly Leu Thr Ile Asp Leu Glu			
190	195	200	205
gag cag aag ctc tac tgg gct gac gcc aag ctc agc ttc atc cac cgt			733

Glu Gln Lys Leu Tyr Trp Ala Asp Ala Lys Leu Ser Phe Ile His Arg	
210	215
220	
gcc aac ctg gac ggc tcg ttc cgg cag aag gtg gtg gag ggc agc ctg	781
Ala Asn Leu Asp Gly Ser Phe Arg Gln Lys Val Val Glu Gly Ser Leu	
225	230
235	
acg cac ccc ttc gcc ctg acg ctc tcc ggg gac act ctg tac tgg aca	829
Thr His Pro Phe Ala Leu Thr Leu Ser Gly Asp Thr Leu Tyr Trp Thr	
240	245
250	
gac tgg cag acc cgc tcc atc cat gcc tgc aac aag cgc act ggg ggg	877
Asp Trp Gln Thr Arg Ser Ile His Ala Cys Asn Lys Arg Thr Gly Gly	
255	260
265	
aag agg aag gag atc ctg agt gcc ctc tac tca ccc atg gac atc cag	925
Lys Arg Lys Glu Ile Leu Ser Ala Leu Tyr Ser Pro Met Asp Ile Gln	
270	275
280	285
gtg ctg agc cag gag cgg cag cct ttc ttc cac act cgc tgt gag gag	973
Val Leu Ser Gln Glu Arg Gln Pro Phe Phe His Thr Arg Cys Glu Glu	
290	295
300	
gac aat ggc ggc tgc tcc cac ctg tgc ctg ctg tcc cca agc gag cct	1021
Asp Asn Gly Gly Cys Ser His Leu Cys Leu Leu Ser Pro Ser Glu Pro	
305	310
315	
ttc tac aca tgc gcc tgc ccc acg ggt gtg cag ctg cag gac aac ggc	1069
Phe Tyr Thr Cys Ala Cys Pro Thr Gly Val Gln Leu Gln Asp Asn Gly	
320	325
330	
agg acg tgt aag gca gga gcc gag gag gtg ctg ctg ctg gcc cgg cgg	1117
Arg Thr Cys Lys Ala Gly Ala Glu Glu Val Leu Leu Leu Ala Arg Arg	
335	340
345	
acg gac cta cgg agg atc tcg ctg gac acg ccg gac ttc acc gac atc	1165
Thr Asp Leu Arg Arg Ile Ser Leu Asp Thr Pro Asp Phe Thr Asp Ile	
350	355
360	365

gtg ctg cag gtg gac gac atc cgg cac gcc att gcc atc gac tac gac	1213
Val Leu Gln Val Asp Asp Ile Arg His Ala Ile Ala Ile Asp Tyr Asp	
370 375 380	
cgg cta gag ggc tat gtc tac tgg aca gat gac gag gtg cgg gcc atc	1261
Pro Leu Glu Gly Tyr Val Tyr Trp Thr Asp Asp Glu Val Arg Ala Ile	
385 390 395	
cgc agg gcg tac ctg gac ggg tct ggg gcg cag acg ctg gtc aac acc	1309
Arg Arg Ala Tyr Leu Asp Gly Ser Gly Ala Gln Thr Leu Val Asn Thr	
400 405 410	
gag atc aac gac ccc gat ggc atc gcg gtc gac tgg gtg gcc cga aac	1357
Glu Ile Asn Asp Pro Asp Gly Ile Ala Val Asp Trp Val Ala Arg Asn	
415 420 425	
ctc tac tgg acc gac acg ggc acg gac cgc atc gag gtg acg cgc ctc	1405
Leu Tyr Trp Thr Asp Thr Gly Thr Asp Arg Ile Glu Val Thr Arg Leu	
430 435 440 445	
aac ggc acc tcc cgc aag atc ctg gtg tcg gag gac ctg gac gag ccc	1453
Asn Gly Thr Ser Arg Lys Ile Leu Val Ser Glu Asp Leu Asp Glu Pro	
450 455 460	
cga gcc atc gca ctg cac ccc gtg atg ggc ctc atg tac tgg aca gac	1501
Arg Ala Ile Ala Leu His Pro Val Met Gly Leu Met Tyr Trp Thr Asp	
465 470 475	
tgg gga gag aac cct aaa atc gag tgt gcc aac ttg gat ggg cag gag	1549
Trp Gly Glu Asn Pro Lys Ile Glu Cys Ala Asn Leu Asp Gly Gln Glu	
480 485 490	
cgg cgt gtg ctg gtc aat gcc tcc ctc ggg tgg ccc aac ggc ctg gcc	1597
Arg Arg Val Leu Val Asn Ala Ser Leu Gly Trp Pro Asn Gly Leu Ala	
495 500 505	
ctg gac ctg cag gag ggg aag ctc tac tgg gga gac gcc aag aca gac	1645
Leu Asp Leu Gln Glu Gly Lys Leu Tyr Trp Gly Asp Ala Lys Thr Asp	

510	515	520	525	
aag atc gag gtg atc aat gtt gat ggg acg aag agg cgg acc ctc ctg				1693
Lys Ile Glu Val Ile Asn Val Asp Gly Thr Lys Arg Arg Thr Leu Leu				
	530	535	540	
	gag gac aag ctc ccg cac att ttc ggg ttc acg ctg ctg ggg gac ttc			1741
	Glu Asp Lys Leu Pro His Ile Phe Gly Phe Thr Leu Leu Gly Asp Phe			
	545	550	555	
	atc tac tgg act gac tgg cag cgc cgc agc atc gag cgg gtg cac aag			1789
	Ile Tyr Trp Thr Asp Trp Gln Arg Arg Ser Ile Glu Arg Val His Lys			
	560	565	570	
	gtc aag gcc agc cgg gac gtc atc att gac cag ctg ccc gac ctg atg			1837
	Val Lys Ala Ser Arg Asp Val Ile Ile Asp Gln Leu Pro Asp Leu Met			
	575	580	585	
	ggg ctc aaa gct gtg aat gtg gcc aag gtc gtc gga acc aac ccg tgt			1885
	Gly Leu Lys Ala Val Asn Val Ala Lys Val Val Gly Thr Asn Pro Cys			
590	595	600	605	
gcg gac agg aac ggg ggg tgc agc cac ctg tgc ttc ttc aca ccc cac				1933
Ala Asp Arg Asn Gly Gly Cys Ser His Leu Cys Phe Phe Thr Pro His				
	610	615	620	
	gca acc cgg tgt ggc tgc ccc atc ggc ctg gag ctg ctg agt gac atg			1981
	Ala Thr Arg Cys Gly Cys Pro Ile Gly Leu Glu Leu Leu Ser Asp Met			
	625	630	635	
	aag acc tgc atc gtg cct gag gcc ttc ttg gtc ttc acc agc aga gcc			2029
	Lys Thr Cys Ile Val Pro Glu Ala Phe Leu Val Phe Thr Ser Arg Ala			
	640	645	650	
	gcc atc cac agg atc tcc ctc gag acc aat aac aac gac gtg gcc atc			2077
	Ala Ile His Arg Ile Ser Leu Glu Thr Asn Asn Asn Asp Val Ala Ile			
	655	660	665	
	ccg ctc acg ggc gtc aag gag gcc tca gcc ctg gac ttt gat gtg tcc			2125

Pro	Leu	Thr	Gly	Val	Lys	Glu	Ala	Ser	Ala	Leu	Asp	Phe	Asp	Val	Ser	
670					675					680					685	
aac	aac	cac	atc	tac	tgg	aca	gac	gtc	agc	ctg	aag	acc	atc	agc	cgc	2173
Asn	Asn	His	Ile	Tyr	Trp	Thr	Asp	Val	Ser	Leu	Lys	Thr	Ile	Ser	Arg	
				690					695					700		
gcc	ttc	atg	aac	ggg	agc	tcg	gtg	gag	cac	gtg	gtg	gag	ttt	ggc	ctt	2221
Ala	Phe	Met	Asn	Gly	Ser	Ser	Val	Glu	His	Val	Val	Glu	Phe	Gly	Leu	
			705					710					715			
gac	tac	ccc	gag	ggc	atg	gcc	gtt	gac	tgg	atg	ggc	aag	aac	ctc	tac	2269
Asp	Tyr	Pro	Glu	Gly	Met	Ala	Val	Asp	Trp	Met	Gly	Lys	Asn	Leu	Tyr	
		720					725					730				
tgg	gcc	gac	act	ggg	acc	aac	aga	atc	gaa	gtg	gcg	cgg	ctg	gac	ggg	2317
Trp	Ala	Asp	Thr	Gly	Thr	Asn	Arg	Ile	Glu	Val	Ala	Arg	Leu	Asp	Gly	
	735					740				745						
cag	ttc	cgg	caa	gtc	ctc	gtg	tgg	agg	gac	ttg	gac	aac	ccg	agg	tcg	2365
Gln	Phe	Arg	Gln	Val	Leu	Val	Trp	Arg	Asp	Leu	Asp	Asn	Pro	Arg	Ser	
750					755					760					765	
ctg	gcc	ctg	gat	ccc	acc	aag	ggc	tac	atc	tac	tgg	acc	gag	tgg	ggc	2413
Leu	Ala	Leu	Asp	Pro	Thr	Lys	Gly	Tyr	Ile	Tyr	Trp	Thr	Glu	Trp	Gly	
			770						775				780			
ggc	aag	ccg	agg	atc	gtg	cgg	gcc	ttc	atg	gac	ggg	acc	aac	tgc	atg	2461
Gly	Lys	Pro	Arg	Ile	Val	Arg	Ala	Phe	Met	Asp	Gly	Thr	Asn	Cys	Met	
			785					790					795			
acg	ctg	gtg	gac	aag	gtg	ggc	cgg	gcc	aac	gac	ctc	acc	att	gac	tac	2509
Thr	Leu	Val	Asp	Lys	Val	Gly	Arg	Ala	Asn	Asp	Leu	Thr	Ile	Asp	Tyr	
		800						805					810			
gct	gac	cag	cgc	ctc	tac	tgg	acc	gac	ctg	gac	acc	aac	atg	atc	gag	2557
Ala	Asp	Gln	Arg	Leu	Tyr	Trp	Thr	Asp	Leu	Asp	Thr	Asn	Met	Ile	Glu	
	815					820				825						

tcg tcc aac atg ctg ggt cag gag cgg gtc gtg att gcc gac gat ctc	2605
Ser Ser Asn Met Leu Gly Gln Glu Arg Val Val Ile Ala Asp Asp Leu	
830 835 840 845	
ccg cac ccg ttc ggt ctg acg cag tac agc gat tat atc tac tgg aca	2653
Pro His Pro Phe Gly Leu Thr Gln Tyr Ser Asp Tyr Ile Tyr Trp Thr	
850 855 860	
gac tgg aat ctg cac agc att gag cgg gcc gac aag act agc ggc cgg	2701
Asp Trp Asn Leu His Ser Ile Glu Arg Ala Asp Lys Thr Ser Gly Arg	
865 870 875	
aac cgc acc ctc atc cag ggc cac ctg gac ttc gtg atg gac atc ctg	2749
Asn Arg Thr Leu Ile Gln Gly His Leu Asp Phe Val Met Asp Ile Leu	
880 885 890	
gtg ttc cac tcc tcc cgc cag gat ggc ctc aat gac tgt atg cac aac	2797
Val Phe His Ser Ser Arg Gln Asp Gly Leu Asn Asp Cys Met His Asn	
895 900 905	
aac ggg cag tgt ggg cag ctg tgc ctt gcc atc ccc ggc ggc cac cgc	2845
Asn Gly Gln Cys Gly Gln Leu Cys Leu Ala Ile Pro Gly Gly His Arg	
910 915 920 925	
tgc ggc tgc gcc tca cac tac acc ctg gac ccc agc agc cgc aac tgc	2893
Cys Gly Cys Ala Ser His Tyr Thr Leu Asp Pro Ser Ser Arg Asn Cys	
930 935 940	
agc ccg ccc acc acc ttc ttg ctg ttc agc cag aaa tct gcc atc agt	2941
Ser Pro Pro Thr Thr Phe Leu Leu Phe Ser Gln Lys Ser Ala Ile Ser	
945 950 955	
cgg atg atc ccg gac gac cag cac agc ccg gat ctc atc ctg ccc ctg	2989
Arg Met Ile Pro Asp Asp Gln His Ser Pro Asp Leu Ile Leu Pro Leu	
960 965 970	
cat gga ctg agg aac gtc aaa gcc atc gac tat gac cca ctg gac aag	3037
His Gly Leu Arg Asn Val Lys Ala Ile Asp Tyr Asp Pro Leu Asp Lys	

975	980	985	
ttc atc tac tgg gtg gat ggg cgc cag aac atc aag cga gcc aag gac			3085
Phe Ile Tyr Trp Val Asp Gly Arg Gln Asn Ile Lys Arg Ala Lys Asp			
990	995	1000	1005
gac ggg acc cag ccc ttt gtt ttg acc tct ctg agc caa ggc caa aac			3133
Asp Gly Thr Gln Pro Phe Val Leu Thr Ser Leu Ser Gln Gly Gln Asn			
	1010	1015	1020
cca gac agg cag ccc cac gac ctc agc atc gac atc tac agc cgg aca			3181
Pro Asp Arg Gln Pro His Asp Leu Ser Ile Asp Ile Tyr Ser Arg Thr			
	1025	1030	1035
ctg ttc tgg acg tgc gag gcc acc aat acc atc aac gtc cac agg ctg			3229
Leu Phe Trp Thr Cys Glu Ala Thr Asn Thr Ile Asn Val His Arg Leu			
	1040	1045	1050
agc ggg gaa gcc atg ggg gtg gtg ctg cgt ggg gac cgc gac aag ccc			3277
Ser Gly Glu Ala Met Gly Val Val Leu Arg Gly Asp Arg Asp Lys Pro			
	1055	1060	1065
agg gcc atc gtc gtc aac gcg gag cga ggg tac ctg tac ttc acc aac			3325
Arg Ala Ile Val Val Asn Ala Glu Arg Gly Tyr Leu Tyr Phe Thr Asn			
1070	1075	1080	1085
atg cag gac cgg gca gcc aag atc gaa cgc gca gcc ctg gac ggc acc			3373
Met Gln Asp Arg Ala Ala Lys Ile Glu Arg Ala Ala Leu Asp Gly Thr			
	1090	1095	1100
gag cgc gag gtc ctc ttc acc acc ggc ctc atc cgc cct gtg gcc ctg			3421
Glu Arg Glu Val Leu Phe Thr Thr Gly Leu Ile Arg Pro Val Ala Leu			
	1105	1110	1115
gtg gtg gac aac aca ctg ggc aag ctg ttc tgg gtg gac gcg gac ctg			3469
Val Val Asp Asn Thr Leu Gly Lys Leu Phe Trp Val Asp Ala Asp Leu			
	1120	1125	1130
aag cgc att gag agc tgt gac ctg tca ggg gcc aac cgc ctg acc ctg			3517

Lys Arg Ile Glu Ser Cys Asp Leu Ser Gly Ala Asn Arg Leu Thr Leu
 1135 1140 1145
 gag gac gcc aac atc gtg cag cct ctg ggc ctg acc atc ctt ggc aag 3565
 Glu Asp Ala Asn Ile Val Gln Pro Leu Gly Leu Thr Ile Leu Gly Lys
 1150 1155 1160 1165
 cat ctc tac tgg atc gac cgc cag cag cag atg atc gag cgt gtg gag 3613
 His Leu Tyr Trp Ile Asp Arg Gln Gln Gln Met Ile Glu Arg Val Glu
 1170 1175 1180
 aag acc acc ggg gac aag cgg act cgc atc cag ggc cgt gtc gcc cac 3661
 Lys Thr Thr Gly Asp Lys Arg Thr Arg Ile Gln Gly Arg Val Ala His
 1185 1190 1195
 ctc act ggc atc cat gca gtg gag gaa gtc agc ctg gag gag ttc tca 3709
 Leu Thr Gly Ile His Ala Val Glu Glu Val Ser Leu Glu Glu Phe Ser
 1200 1205 1210
 gcc cac cca tgt gcc cgt gac aat ggt ggc tgc tcc cac atc tgt att 3757
 Ala His Pro Cys Ala Arg Asp Asn Gly Gly Cys Ser His Ile Cys Ile
 1215 1220 1225
 gcc aag ggt gat ggg aca cca cgg tgc tca tgc cca gtc cac ctc gtg 3805
 Ala Lys Gly Asp Gly Thr Pro Arg Cys Ser Cys Pro Val His Leu Val
 1230 1235 1240 1245
 ctc ctg cag aac ctg ctg acc tgt gga gag ccg ccc acc tgc tcc ccg 3853
 Leu Leu Gln Asn Leu Leu Thr Cys Gly Glu Pro Pro Thr Cys Ser Pro
 1250 1255 1260
 gac cag ttt gca tgt gcc aca ggg gag atc gac tgt atc ccc ggg gcc 3901
 Asp Gln Phe Ala Cys Ala Thr Gly Glu Ile Asp Cys Ile Pro Gly Ala
 1265 1270 1275
 tgg cgc tgt gac ggc ttt ccc gag tgc gat gac cag agc gac gag gag 3949
 Trp Arg Cys Asp Gly Phe Pro Glu Cys Asp Asp Gln Ser Asp Glu Glu
 1280 1285 1290

ggc tgc ccc gtg tgc tcc gcc gcc cag ttc ccc tgc gcg cgg ggt cag	3997
Gly Cys Pro Val Cys Ser Ala Ala Gln Phe Pro Cys Ala Arg Gly Gln	
1295 1300 1305	
tgt gtg gac ctg cgc ctg cgc tgc gac ggc gag gca gac tgt cag gac	4045
Cys Val Asp Leu Arg Leu Arg Cys Asp Gly Glu Ala Asp Cys Gln Asp	
1310 1315 1320 1325	
cgc tca gac gag gtg gac tgt gac gcc atc tgc ctg ccc aac cag ttc	4093
Arg Ser Asp Glu Val Asp Cys Asp Ala Ile Cys Leu Pro Asn Gln Phe	
1330 1335 1340	
cgg tgt gcg agc ggc cag tgt gtc ctc atc aaa cag cag tgc gac tcc	4141
Arg Cys Ala Ser Gly Gln Cys Val Leu Ile Lys Gln Gln Cys Asp Ser	
1345 1350 1355	
ttc ccc gac tgt atc gac ggc tcc gac gag ctc atg tgt gaa atc acc	4189
Phe Pro Asp Cys Ile Asp Gly Ser Asp Glu Leu Met Cys Glu Ile Thr	
1360 1365 1370	
aag ccg ccc tca gac gac agc ccg gcc cac agc agt gcc atc ggg ccc	4237
Lys Pro Pro Ser Asp Asp Ser Pro Ala His Ser Ser Ala Ile Gly Pro	
1375 1380 1385	
gtc att ggc atc atc ctc tct ctc ttc gtc atg ggt ggt gtc tat ttt	4285
Val Ile Gly Ile Ile Leu Ser Leu Phe Val Met Gly Gly Val Tyr Phe	
1390 1395 1400 1405	
gtg tgc cag cgc gtg gtg tgc cag cgc tat gcg ggg gcc aac ggg ccc	4333
Val Cys Gln Arg Val Val Cys Gln Arg Tyr Ala Gly Ala Asn Gly Pro	
1410 1415 1420	
ttc ccg cac gag tat gtc agc ggg acc ccg cac gtg ccc ctc aat ttc	4381
Phe Pro His Glu Tyr Val Ser Gly Thr Pro His Val Pro Leu Asn Phe	
1425 1430 1435	
ata gcc ccg ggc ggt tcc cag cat ggc ccc ttc aca ggc atc gca tgc	4429
Ile Ala Pro Gly Gly Ser Gln His Gly Pro Phe Thr Gly Ile Ala Cys	

1440	1445	1450	
gga aag tcc atg atg agc tcc gtg agc ctg atg ggg ggc cgg ggc ggg			4477
Gly Lys Ser Met Met Ser Ser Val Ser Leu Met Gly Gly Arg Gly Gly			
1455	1460	1465	
gtg ccc ctc tac gac cgg aac cac gtc aca ggg gcc tcg tcc agc agc			4525
Val Pro Leu Tyr Asp Arg Asn His Val Thr Gly Ala Ser Ser Ser Ser			
1470	1475	1480	1485
tcg tcc agc acg aag gcc acg ctg tac ccg ccg atc ctg aac ccg ccg			4573
Ser Ser Ser Thr Lys Ala Thr Leu Tyr Pro Pro Ile Leu Asn Pro Pro			
	1490	1495	1500
ccc tcc ccg gcc acg gac ccc tcc ctg tac aac atg gac atg ttc tac			4621
Pro Ser Pro Ala Thr Asp Pro Ser Leu Tyr Asn Met Asp Met Phe Tyr			
	1505	1510	1515
tct tca aac att ccg gcc act gcg aga ccg tac agg ccc tac atc att			4669
Ser Ser Asn Ile Pro Ala Thr Ala Arg Pro Tyr Arg Pro Tyr Ile Ile			
	1520	1525	1530
cga gga atg gcg ccc ccg acg acg ccc tgc agc acc gac gtg tgt gac			4717
Arg Gly Met Ala Pro Pro Thr Thr Pro Cys Ser Thr Asp Val Cys Asp			
	1535	1540	1545
agc gac tac agc gcc agc cgc tgg aag gcc agc aag tac tac ctg gat			4765
Ser Asp Tyr Ser Ala Ser Arg Trp Lys Ala Ser Lys Tyr Tyr Leu Asp			
1550	1555	1560	1565
ttg aac tcg gac tca gac ccc tat cca ccc cca ccc acg ccc cac agc			4813
Leu Asn Ser Asp Ser Asp Pro Tyr Pro Pro Pro Pro Thr Pro His Ser			
	1570	1575	1580
cag tac ctg tcg gcg gag gac agc tgc ccg ccc tcg ccc gcc acc gag			4861
Gln Tyr Leu Ser Ala Glu Asp Ser Cys Pro Pro Ser Pro Ala Thr Glu			
	1585	1590	1595
agg agc tac ttc cat ctc ttc ccg ccc cct ccg tcc ccc tgc acg gac			4909

Arg Ser Tyr Phe His Leu Phe Pro Pro Pro Pro Ser Pro Cys Thr Asp

1600

1605

1610

tca tcc tgacctcggc cgggccactc tggcttctct gtgccctgt aaatagtttt 4965

Ser Ser

1615

aaatatgaac aaagaaaaaa atatatttta tgatttaaaa aataaatata attgggattt 5025

taaaaacatg agaaatgtga actgtgatgg ggtgggcagg gctgggagaa ctttgtacag 5085

tggagaaata ttataaaact taattttgta aaaca 5120

<210> 3

<211> 1615

<212> PRT

<213> Homo sapiens

<400> 3

Met Glu Ala Ala Pro Pro Gly Pro Pro Trp Pro Leu Leu Leu Leu Leu

1

5

10

15

Leu Leu Leu Leu Ala Leu Cys Gly Cys Pro Ala Pro Ala Ala Ala Ser

20

25

30

Pro Leu Leu Leu Phe Ala Asn Arg Arg Asp Val Arg Leu Val Asp Ala

35

40

45

Gly Gly Val Lys Leu Glu Ser Thr Ile Val Val Ser Gly Leu Glu Asp

50

55

60

Ala Ala Ala Val Asp Phe Gln Phe Ser Lys Gly Ala Val Tyr Trp Thr

65

70

75

80

Asp Val Ser Glu Glu Ala Ile Lys Gln Thr Tyr Leu Asn Gln Thr Gly

85

90

95

Ala Ala Val Gln Asn Val Val Ile Ser Gly Leu Val Ser Pro Asp Gly

100

105

110

Leu Ala Cys Asp Trp Val Gly Lys Lys Leu Tyr Trp Thr Asp Ser Glu
 115 120 125
 Thr Asn Arg Ile Glu Val Ala Asn Leu Asn Gly Thr Ser Arg Lys Val
 130 135 140
 Leu Phe Trp Gln Asp Leu Asp Gln Pro Lys Ala Ile Ala Leu Asp Pro
 145 150 155 160
 Ala His Gly Tyr Met Tyr Trp Thr Asp Trp Gly Glu Thr Pro Arg Ile
 165 170 175
 Glu Arg Ala Gly Met Asp Gly Ser Thr Arg Lys Ile Ile Val Asp Ser
 180 185 190
 Asp Ile Tyr Trp Pro Asn Gly Leu Thr Ile Asp Leu Glu Glu Gln Lys
 195 200 205
 Leu Tyr Trp Ala Asp Ala Lys Leu Ser Phe Ile His Arg Ala Asn Leu
 210 215 220
 Asp Gly Ser Phe Arg Gln Lys Val Val Glu Gly Ser Leu Thr His Pro
 225 230 235 240
 Phe Ala Leu Thr Leu Ser Gly Asp Thr Leu Tyr Trp Thr Asp Trp Gln
 245 250 255
 Thr Arg Ser Ile His Ala Cys Asn Lys Arg Thr Gly Gly Lys Arg Lys
 260 265 270
 Glu Ile Leu Ser Ala Leu Tyr Ser Pro Met Asp Ile Gln Val Leu Ser
 275 280 285
 Gln Glu Arg Gln Pro Phe Phe His Thr Arg Cys Glu Glu Asp Asn Gly
 290 295 300
 Gly Trp Ser His Leu Cys Leu Leu Ser Pro Ser Glu Pro Phe Tyr Thr
 305 310 315 320
 Cys Ala Cys Pro Thr Gly Val Gln Met Gln Asp Asn Gly Arg Thr Cys
 325 330 335
 Lys Ala Gly Ala Glu Glu Val Leu Leu Leu Ala Arg Arg Thr Asp Leu

340	345	350	
Arg Arg Ile Ser Leu Asp Thr Pro Asp Phe Thr Asp Ile Val Leu Gln			
355	360	365	
Val Asp Asp Ile Arg His Ala Ile Ala Ile Asp Tyr Asp Pro Leu Glu			
370	375	380	
Gly Tyr Val Tyr Trp Thr Asp Asp Glu Val Arg Ala Ile Arg Arg Ala			
385	390	395	400
Tyr Leu Asp Gly Ser Gly Ala Gln Thr Leu Val Asn Thr Glu Ile Asn			
405	410	415	
Asp Pro Asp Gly Ile Ala Val Asp Trp Val Ala Arg Asn Leu Tyr Trp			
420	425	430	
Thr Asp Thr Gly Thr Asp Arg Ile Glu Val Thr Arg Leu Asn Gly Thr			
435	440	445	
Ser Arg Lys Ile Leu Val Ser Glu Asp Leu Asp Glu Pro Arg Ala Ile			
450	455	460	
Ala Leu His Pro Val Met Gly Leu Met Tyr Trp Thr Asp Trp Gly Glu			
465	470	475	480
Asn Pro Lys Ile Glu Cys Ala Asn Leu Asp Gly Gln Glu Arg Arg Val			
485	490	495	
Leu Val Asn Ala Ser Leu Gly Trp Pro Asn Gly Leu Ala Leu Asp Leu			
500	505	510	
Gln Glu Gly Lys Leu Tyr Trp Gly Asp Ala Lys Thr Asp Lys Ile Glu			
515	520	525	
Val Ile Asn Val Asp Gly Thr Lys Arg Arg Thr Leu Leu Glu Asp Lys			
530	535	540	
Leu Pro His Ile Phe Gly Phe Thr Leu Leu Gly Asp Phe Ile Tyr Trp			
545	550	555	560
Thr Asp Trp Gln Arg Arg Ser Ile Glu Arg Val His Lys Val Lys Ala			
565	570	575	

Ser Arg Asp Val Ile Ile Asp Gln Leu Pro Asp Leu Met Gly Leu Lys
 580 585 590
 Ala Val Asn Val Ala Lys Val Val Gly Thr Asn Pro Cys Ala Asp Arg
 595 600 605
 Asn Gly Gly Cys Ser His Leu Cys Phe Phe Thr Pro His Ala Thr Arg
 610 615 620
 Cys Gly Cys Pro Ile Gly Leu Glu Leu Leu Ser Asp Met Lys Thr Cys
 625 630 635 640
 Ile Val Pro Glu Ala Phe Leu Val Phe Thr Ser Arg Ala Ala Ile His
 645 650 655
 Arg Ile Ser Leu Glu Thr Asn Asn Asn Asp Val Ala Ile Pro Leu Thr
 660 665 670
 Gly Val Lys Glu Ala Ser Ala Leu Asp Phe Asp Val Ser Asn Asn His
 675 680 685
 Ile Tyr Trp Thr Asp Val Ser Leu Lys Asn Ile Ser Arg Ala Phe Met
 690 695 700
 Asn Gly Ser Ser Val Glu His Val Val Glu Phe Gly Leu Asp Tyr Pro
 705 710 715 720
 Glu Gly Met Ala Val Asp Trp Met Gly Lys Asn Leu Tyr Trp Ala Asp
 725 730 735
 Thr Gly Thr Asn Arg Ile Glu Val Ala Arg Leu Asp Gly Gln Phe Arg
 740 745 750
 Gln Val Leu Val Trp Arg Asp Leu Asp Asn Pro Arg Ser Leu Ala Leu
 755 760 765
 Asp Pro Thr Lys Gly Tyr Ile Tyr Trp Thr Glu Trp Gly Gly Lys Pro
 770 775 780
 Arg Ile Val Arg Ala Phe Met Asp Gly Thr Asn Cys Met Thr Leu Val
 785 790 795 800
 Asp Lys Val Gly Arg Ala Asn Asp Leu Thr Ile Asp Tyr Ala Asp Gln

805	810	815	
Arg Leu Tyr Trp Thr Asp Leu Asp Thr Asn Met Ile Glu Ser Ser Asn			
820	825	830	
Met Leu Gly Gln Glu Arg Val Val Ile Ala Asp Asp Leu Pro His Pro			
835	840	845	
Phe Gly Leu Thr Gln Tyr Ser Asp Tyr Ile Tyr Trp Thr Asp Trp Asn			
850	855	860	
Leu His Ser Ile Glu Arg Ala Asp Lys Thr Ser Gly Arg Asn Arg Thr			
865	870	875	880
Leu Ile Gln Gly His Leu Asp Phe Val Met Asp Ile Leu Val Phe His			
885	890	895	
Ser Ser Arg Gln Asp Gly Leu Asn Asp Cys Met His Asn Asn Gly Gln			
900	905	910	
Cys Gly Gln Leu Cys Leu Ala Ile Pro Gly Gly His Arg Cys Gly Cys			
915	920	925	
Ala Ser His Tyr Thr Leu Asp Pro Ser Ser Arg Asn Cys Ser Pro Pro			
930	935	940	
Thr Thr Phe Leu Leu Phe Ser Gln Lys Ser Ala Ile Ser Arg Met Ile			
945	950	955	960
Pro Asp Asp Gln His Ser Pro Asp Leu Ile Leu Pro Leu His Gly Leu			
965	970	975	
Arg Asn Val Lys Ala Ile Asp Tyr Asp Pro Leu Asp Lys Phe Ile Tyr			
980	985	990	
Trp Val Asp Gly Arg Gln Asn Ile Lys Arg Ala Lys Asp Asp Gly Thr			
995	1000	1005	
Gln Pro Phe Val Leu Thr Ser Leu Ser Gln Gly Gln Asn Pro Asp Arg			
1010	1015	1020	
Gln Pro His Asp Leu Ser Ile Asp Ile Tyr Ser Arg Thr Leu Phe Trp			
1025	1030	1035	1040

Thr Cys Glu Ala Thr Asn Thr Ile Asn Val His Arg Leu Ser Gly Glu			
1045	1050	1055	
Ala Met Gly Val Val Leu Arg Gly Asp Arg Asp Lys Pro Arg Ala Ile			
1060	1065	1070	
Val Val Asn Ala Glu Arg Gly Tyr Leu Tyr Phe Thr Asn Met Gln Asp			
1075	1080	1085	
Arg Ala Ala Lys Ile Glu Arg Ala Ala Leu Asp Gly Thr Glu Arg Glu			
1090	1095	1100	
Val Leu Phe Thr Thr Gly Leu Ile Arg Pro Val Ala Leu Val Val Asp			
1105	1110	1115	1120
Asn Thr Leu Gly Lys Leu Phe Trp Val Asp Ala Asp Leu Lys Arg Ile			
1125	1130	1135	
Glu Ser Cys Asp Leu Ser Gly Ala Asn Arg Leu Thr Leu Glu Asp Ala			
1140	1145	1150	
Asn Ile Val Gln Pro Leu Gly Leu Thr Ile Leu Gly Lys His Leu Tyr			
1155	1160	1165	
Trp Ile Asp Arg Gln Gln Gln Met Ile Glu Arg Val Glu Lys Thr Thr			
1170	1175	1180	
Gly Asp Lys Arg Thr Arg Ile Gln Gly Arg Val Ala His Leu Thr Gly			
1185	1190	1195	1200
Ile His Ala Val Glu Glu Val Ser Leu Glu Glu Phe Ser Ala His Pro			
1205	1210	1215	
Cys Ala Arg Asp Asn Gly Gly Cys Ser His Ile Cys Ile Ala Lys Gly			
1220	1225	1230	
Asp Gly Thr Pro Arg Cys Ser Cys Pro Val His Leu Val Leu Leu Gln			
1235	1240	1245	
Asn Leu Leu Thr Cys Gly Glu Pro Pro Thr Cys Ser Pro Asp Gln Phe			
1250	1255	1260	
Ala Cys Ala Thr Gly Glu Ile Asp Cys Ile Pro Gly Ala Trp Arg Cys			

1265	1270	1275	1280
Asp Gly Phe Pro Glu Cys Asp Asp Gln Ser Asp Glu Glu Gly Cys Pro			
1285	1290	1295	
Val Cys Ser Ala Ala Gln Phe Pro Cys Ala Arg Gly Gln Cys Val Asp			
1300	1305	1310	
Leu Arg Leu Arg Cys Asp Gly Glu Ala Asp Cys Gln Asp Arg Ser Asp			
1315	1320	1325	
Glu Val Asp Cys Asp Ala Ile Cys Leu Pro Asn Gln Phe Arg Cys Ala			
1330	1335	1340	
Ser Gly Gln Cys Val Leu Ile Lys Gln Gln Cys Asp Ser Phe Pro Asp			
1345	1350	1355	1360
Cys Ile Asp Gly Ser Asp Glu Leu Met Cys Glu Ile Thr Lys Pro Pro			
1365	1370	1375	
Ser Asp Asp Ser Pro Ala His Ser Ser Ala Ile Gly Pro Val Ile Gly			
1380	1385	1390	
Ile Ile Leu Ser Leu Phe Val Met Gly Gly Val Tyr Phe Val Cys Gln			
1395	1400	1405	
Arg Val Val Cys Gln Arg Tyr Ala Gly Ala Asn Gly Pro Phe Pro His			
1410	1415	1420	
Glu Tyr Val Ser Gly Thr Pro His Val Pro Leu Asn Phe Ile Ala Pro			
1425	1430	1435	1440
Gly Gly Ser Gln His Gly Pro Phe Thr Gly Ile Ala Cys Gly Lys Ser			
1445	1450	1455	
Met Met Ser Ser Val Ser Leu Met Gly Gly Arg Gly Gly Val Pro Leu			
1460	1465	1470	
Tyr Asp Arg Asn His Val Thr Gly Ala Ser Ser Ser Ser Ser Ser Ser			
1475	1480	1485	
Thr Lys Ala Thr Leu Tyr Pro Pro Ile Leu Asn Pro Pro Pro Ser Pro			
1490	1495	1500	

Ala Thr Asp Pro Ser Leu Tyr Asn Met Asp Met Phe Tyr Ser Ser Asn
 1505 1510 1515 1520
 Ile Pro Ala Thr Ala Arg Pro Tyr Arg Pro Tyr Ile Ile Arg Gly Met
 1525 1530 1535
 Ala Pro Pro Thr Thr Pro Cys Ser Thr Asp Val Cys Asp Ser Asp Tyr
 1540 1545 1550
 Ser Ala Ser Arg Trp Lys Ala Ser Lys Tyr Tyr Leu Asp Leu Asn Ser
 1555 1560 1565
 Asp Ser Asp Pro Tyr Pro Pro Pro Pro Thr Pro His Ser Gln Tyr Leu
 1570 1575 1580
 Ser Ala Glu Asp Ser Cys Pro Pro Ser Pro Ala Thr Glu Arg Ser Tyr
 1585 1590 1595 1600
 Phe His Leu Phe Pro Pro Pro Pro Ser Pro Cys Thr Asp Ser Ser
 1605 1610 1615

<210> 4

<211> 1615

<212> PRT

<213> Homo sapiens

<400> 4

Met Glu Ala Ala Pro Pro Gly Pro Pro Trp Pro Leu Leu Leu Leu Leu
 1 5 10 15
 Leu Leu Leu Leu Ala Leu Cys Gly Cys Pro Ala Pro Ala Ala Ala Ser
 20 25 30
 Pro Leu Leu Leu Phe Ala Asn Arg Arg Asp Val Arg Leu Val Asp Ala
 35 40 45
 Gly Gly Val Lys Leu Glu Ser Thr Ile Val Val Ser Gly Leu Glu Asp

50	55	60
Ala Ala Ala Val Asp Phe Gln Phe Ser Lys Gly Ala Val Tyr Trp Thr		
65	70	75
Asp Val Ser Glu Glu Ala Ile Lys Gln Thr Tyr Leu Asn Gln Thr Gly		80
	85	90
Ala Ala Val Gln Asn Val Val Ile Ser Gly Leu Val Ser Pro Asp Gly		95
	100	105
Leu Ala Cys Asp Trp Val Gly Lys Lys Leu Tyr Trp Thr Asp Ser Glu		110
	115	120
Thr Asn Arg Ile Glu Val Ala Asn Leu Asn Gly Thr Ser Arg Lys Val		125
	130	135
Leu Phe Trp Gln Asp Leu Asp Gln Pro Lys Ala Ile Ala Leu Asp Pro		140
145	150	155
Ala His Gly Tyr Met Tyr Trp Thr Asp Trp Val Glu Thr Pro Arg Ile		160
	165	170
Glu Arg Ala Gly Met Asp Gly Ser Thr Arg Lys Ile Ile Val Asp Ser		175
	180	185
Asp Ile Tyr Trp Pro Asn Gly Leu Thr Ile Asp Leu Glu Glu Gln Lys		190
	195	200
Leu Tyr Trp Ala Asp Ala Lys Leu Ser Phe Ile His Arg Ala Asn Leu		205
	210	215
Asp Gly Ser Phe Arg Gln Lys Val Val Glu Gly Ser Leu Thr His Pro		220
225	230	235
Phe Ala Leu Thr Leu Ser Gly Asp Thr Leu Tyr Trp Thr Asp Trp Gln		240
	245	250
Thr Arg Ser Ile His Ala Cys Asn Lys Arg Thr Gly Gly Lys Arg Lys		255
	260	265
Glu Ile Leu Ser Ala Leu Tyr Ser Pro Met Asp Ile Gln Val Leu Ser		270
	275	280
		285

Gln Glu Arg Gln Pro Phe Phe His Thr Arg Cys Glu Glu Asp Asn Gly
 290 295 300
 Gly Trp Ser His Leu Cys Leu Leu Ser Pro Ser Glu Pro Phe Tyr Thr
 305 310 315 320
 Cys Ala Cys Pro Thr Gly Val Gln Met Gln Asp Asn Gly Arg Thr Cys
 325 330 335
 Lys Ala Gly Ala Glu Glu Val Leu Leu Leu Ala Arg Arg Thr Asp Leu
 340 345 350
 Arg Arg Ile Ser Leu Asp Thr Pro Asp Phe Thr Asp Ile Val Leu Gln
 355 360 365
 Val Asp Asp Ile Arg His Ala Ile Ala Ile Asp Tyr Asp Pro Leu Glu
 370 375 380
 Gly Tyr Val Tyr Trp Thr Asp Asp Glu Val Arg Ala Ile Arg Arg Ala
 385 390 395 400
 Tyr Leu Asp Gly Ser Gly Ala Gln Thr Leu Val Asn Thr Glu Ile Asn
 405 410 415
 Asp Pro Asp Gly Ile Ala Val Asp Trp Val Ala Arg Asn Leu Tyr Trp
 420 425 430
 Thr Asp Thr Gly Thr Asp Arg Ile Glu Val Thr Arg Leu Asn Gly Thr
 435 440 445
 Ser Arg Lys Ile Leu Val Ser Glu Asp Leu Asp Glu Pro Arg Ala Ile
 450 455 460
 Ala Leu His Pro Val Met Gly Leu Met Tyr Trp Thr Asp Trp Gly Glu
 465 470 475 480
 Asn Pro Lys Ile Glu Cys Ala Asn Leu Asp Gly Gln Glu Arg Arg Val
 485 490 495
 Leu Val Asn Ala Ser Leu Gly Trp Pro Asn Gly Leu Ala Leu Asp Leu
 500 505 510
 Gln Glu Gly Lys Leu Tyr Trp Gly Asp Ala Lys Thr Asp Lys Ile Glu

515	520	525
Val Ile Asn Val Asp Gly Thr Lys Arg Arg Thr Leu Leu Glu Asp Lys		
530	535	540
Leu Pro His Ile Phe Gly Phe Thr Leu Leu Gly Asp Phe Ile Tyr Trp		
545	550	555
Thr Asp Trp Gln Arg Arg Ser Ile Glu Arg Val His Lys Val Lys Ala		
565	570	575
Ser Arg Asp Val Ile Ile Asp Gln Leu Pro Asp Leu Met Gly Leu Lys		
580	585	590
Ala Val Asn Val Ala Lys Val Val Gly Thr Asn Pro Cys Ala Asp Arg		
595	600	605
Asn Gly Gly Cys Ser His Leu Cys Phe Phe Thr Pro His Ala Thr Arg		
610	615	620
Cys Gly Cys Pro Ile Gly Leu Glu Leu Leu Ser Asp Met Lys Thr Cys		
625	630	635
Ile Val Pro Glu Ala Phe Leu Val Phe Thr Ser Arg Ala Ala Ile His		
645	650	655
Arg Ile Ser Leu Glu Thr Asn Asn Asn Asp Val Ala Ile Pro Leu Thr		
660	665	670
Gly Val Lys Glu Ala Ser Ala Leu Asp Phe Asp Val Ser Asn Asn His		
675	680	685
Ile Tyr Trp Thr Asp Val Ser Leu Lys Asn Ile Ser Arg Ala Phe Met		
690	695	700
Asn Gly Ser Ser Val Glu His Val Val Glu Phe Gly Leu Asp Tyr Pro		
705	710	715
Glu Gly Met Ala Val Asp Trp Met Gly Lys Asn Leu Tyr Trp Ala Asp		
725	730	735
Thr Gly Thr Asn Arg Ile Glu Val Ala Arg Leu Asp Gly Gln Phe Arg		
740	745	750

Gln Val Leu Val Trp Arg Asp Leu Asp Asn Pro Arg Ser Leu Ala Leu
 755 760 765
 Asp Pro Thr Lys Gly Tyr Ile Tyr Trp Thr Glu Trp Gly Gly Lys Pro
 770 775 780
 Arg Ile Val Arg Ala Phe Met Asp Gly Thr Asn Cys Met Thr Leu Val
 785 790 795 800
 Asp Lys Val Gly Arg Ala Asn Asp Leu Thr Ile Asp Tyr Ala Asp Gln
 805 810 815
 Arg Leu Tyr Trp Thr Asp Leu Asp Thr Asn Met Ile Glu Ser Ser Asn
 820 825 830
 Met Leu Gly Gln Glu Arg Val Val Ile Ala Asp Asp Leu Pro His Pro
 835 840 845
 Phe Gly Leu Thr Gln Tyr Ser Asp Tyr Ile Tyr Trp Thr Asp Trp Asn
 850 855 860
 Leu His Ser Ile Glu Arg Ala Asp Lys Thr Ser Gly Arg Asn Arg Thr
 865 870 875 880
 Leu Ile Gln Gly His Leu Asp Phe Val Met Asp Ile Leu Val Phe His
 885 890 895
 Ser Ser Arg Gln Asp Gly Leu Asn Asp Cys Met His Asn Asn Gly Gln
 900 905 910
 Cys Gly Gln Leu Cys Leu Ala Ile Pro Gly Gly His Arg Cys Gly Cys
 915 920 925
 Ala Ser His Tyr Thr Leu Asp Pro Ser Ser Arg Asn Cys Ser Pro Pro
 930 935 940
 Thr Thr Phe Leu Leu Phe Ser Gln Lys Ser Ala Ile Ser Arg Met Ile
 945 950 955 960
 Pro Asp Asp Gln His Ser Pro Asp Leu Ile Leu Pro Leu His Gly Leu
 965 970 975
 Arg Asn Val Lys Ala Ile Asp Tyr Asp Pro Leu Asp Lys Phe Ile Tyr

980	985	990
Trp Val Asp Gly Arg Gln Asn Ile Lys Arg Ala Lys Asp Asp Gly Thr		
995	1000	1005
Gln Pro Phe Val Leu Thr Ser Leu Ser Gln Gly Gln Asn Pro Asp Arg		
1010	1015	1020
Gln Pro His Asp Leu Ser Ile Asp Ile Tyr Ser Arg Thr Leu Phe Trp		
1025	1030	1035
Thr Cys Glu Ala Thr Asn Thr Ile Asn Val His Arg Leu Ser Gly Glu		
1045	1050	1055
Ala Met Gly Val Val Leu Arg Gly Asp Arg Asp Lys Pro Arg Ala Ile		
1060	1065	1070
Val Val Asn Ala Glu Arg Gly Tyr Leu Tyr Phe Thr Asn Met Gln Asp		
1075	1080	1085
Arg Ala Ala Lys Ile Glu Arg Ala Ala Leu Asp Gly Thr Glu Arg Glu		
1090	1095	1100
Val Leu Phe Thr Thr Gly Leu Ile Arg Pro Val Ala Leu Val Val Asp		
1105	1110	1115
Asn Thr Leu Gly Lys Leu Phe Trp Val Asp Ala Asp Leu Lys Arg Ile		
1125	1130	1135
Glu Ser Cys Asp Leu Ser Gly Ala Asn Arg Leu Thr Leu Glu Asp Ala		
1140	1145	1150
Asn Ile Val Gln Pro Leu Gly Leu Thr Ile Leu Gly Lys His Leu Tyr		
1155	1160	1165
Trp Ile Asp Arg Gln Gln Gln Met Ile Glu Arg Val Glu Lys Thr Thr		
1170	1175	1180
Gly Asp Lys Arg Thr Arg Ile Gln Gly Arg Val Ala His Leu Thr Gly		
1185	1190	1195
Ile His Ala Val Glu Glu Val Ser Leu Glu Glu Phe Ser Ala His Pro		
1205	1210	1215

Cys Ala Arg Asp Asn Gly Gly Cys Ser His Ile Cys Ile Ala Lys Gly			
1220	1225	1230	
Asp Gly Thr Pro Arg Cys Ser Cys Pro Val His Leu Val Leu Leu Gln			
1235	1240	1245	
Asn Leu Leu Thr Cys Gly Glu Pro Pro Thr Cys Ser Pro Asp Gln Phe			
1250	1255	1260	
Ala Cys Ala Thr Gly Glu Ile Asp Cys Ile Pro Gly Ala Trp Arg Cys			
1265	1270	1275	1280
Asp Gly Phe Pro Glu Cys Asp Asp Gln Ser Asp Glu Glu Gly Cys Pro			
1285	1290	1295	
Val Cys Ser Ala Ala Gln Phe Pro Cys Ala Arg Gly Gln Cys Val Asp			
1300	1305	1310	
Leu Arg Leu Arg Cys Asp Gly Glu Ala Asp Cys Gln Asp Arg Ser Asp			
1315	1320	1325	
Glu Val Asp Cys Asp Ala Ile Cys Leu Pro Asn Gln Phe Arg Cys Ala			
1330	1335	1340	
Ser Gly Gln Cys Val Leu Ile Lys Gln Gln Cys Asp Ser Phe Pro Asp			
1345	1350	1355	1360
Cys Ile Asp Gly Ser Asp Glu Leu Met Cys Glu Ile Thr Lys Pro Pro			
1365	1370	1375	
Ser Asp Asp Ser Pro Ala His Ser Ser Ala Ile Gly Pro Val Ile Gly			
1380	1385	1390	
Ile Ile Leu Ser Leu Phe Val Met Gly Gly Val Tyr Phe Val Cys Gln			
1395	1400	1405	
Arg Val Val Cys Gln Arg Tyr Ala Gly Ala Asn Gly Pro Phe Pro His			
1410	1415	1420	
Glu Tyr Val Ser Gly Thr Pro His Val Pro Leu Asn Phe Ile Ala Pro			
1425	1430	1435	1440
Gly Gly Ser Gln His Gly Pro Phe Thr Gly Ile Ala Cys Gly Lys Ser			

1445	1450	1455	
Met Met Ser Ser Val Ser Leu Met Gly Gly Arg Gly Gly Val Pro Leu			
1460	1465	1470	
Tyr Asp Arg Asn His Val Thr Gly Ala Ser Ser Ser Ser Ser Ser Ser			
1475	1480	1485	
Thr Lys Ala Thr Leu Tyr Pro Pro Ile Leu Asn Pro Pro Pro Ser Pro			
1490	1495	1500	
Ala Thr Asp Pro Ser Leu Tyr Asn Met Asp Met Phe Tyr Ser Ser Asn			
1505	1510	1515	1520
Ile Pro Ala Thr Ala Arg Pro Tyr Arg Pro Tyr Ile Ile Arg Gly Met			
1525	1530	1535	
Ala Pro Pro Thr Thr Pro Cys Ser Thr Asp Val Cys Asp Ser Asp Tyr			
1540	1545	1550	
Ser Ala Ser Arg Trp Lys Ala Ser Lys Tyr Tyr Leu Asp Leu Asn Ser			
1555	1560	1565	
Asp Ser Asp Pro Tyr Pro Pro Pro Pro Thr Pro His Ser Gln Tyr Leu			
1570	1575	1580	
Ser Ala Glu Asp Ser Cys Pro Pro Ser Pro Ala Thr Glu Arg Ser Tyr			
1585	1590	1595	1600
Phe His Leu Phe Pro Pro Pro Pro Ser Pro Cys Thr Asp Ser Ser			
1605	1610	1615	

<210> 5

<211> 3096

<212> DNA

<213> Homo sapiens

<400> 5

catcttctca cactatctct cgcttcgcac tecttccttt gattggtttt caccatttac	60
tcagacgacg gtcctttcttc gatctttgca cattcttcta tcactacta ccttcatacc	120
cagctccgtc ccctaataatt catgcgcgga tggcccatte cgtggtgaaa attcccttct	180
actctgctaa tctgctgttc tctctccctc ccgtcgggtt ctgctcctgc cacgttctcc	240
cctctcccca ccaaaggctg ggttttcttt gtcagggtc ctttccctt tggaagaagg	300
ggggctgtat ggccttggtg cgaggccctc cagtgcacag atccccatc acccagagtt	360
ccacaggccc tggtagggag gagggggagc agaagaggag gtgccatctt tgctgtctgg	420
ggaagggcag gggccacca cacagagctc tcccatttgc tgtggaccct ggggccactg	480
cccagttcct tccaaaggaa agccagctcc ccagggtggtg ggagagtgat atggcttctt	540
cttaaactta ggggaattgag tgtgtgggtg cttctaagt ccttagaagc cgggagcggc	600
tcttgaaaag agcctgctg ccacagcggg ccttaccctg gctgtgcca cagatgtccc	660
tggggcctgc cgtcctgcc cggctctctt ggctccccc ggtgtgggtt gggaaaagca	720
cagcaaatta aaaaacacct ccatctctgg ctttgaaga atgcatctga acagccgaga	780
gtgtaaaccg tggtgaaatg tggctcttcc agtttgggga gaagcagggc agagctgggg	840
cttttgtacc cagggtttcc aagagctcct gcctccctcg gctgggctgg ccagggtccc	900
ccgctgggac ctccagctgt aatagggag gttttactgg gttgctggcc actgtggact	960
gcccctaagg gcaggatatgc ctgcctttac ccgggttccc ctctgctg gaagatacag	1020
cccatgggag gcctgttgtc tgtgggatcc tccagcatca gagacactgg ggccagcgtc	1080
tgcctggtga ggtgcaggcc tggcaggccc ggtccccac ctgcttgagc acccacggtg	1140
gtgggggtc gctgcctccc gagacaatct atgtcattgt tgtccaagga agctaattta	1200
gagtagaaag ttccgtgtcc agtccactc tgtgcgtgtg ttagcagggg actctcgggc	1260
cggagctggg tccacctgg tagggggact tcatggggcc tgggcgacag cactgtgtat	1320
ttgtgtgtgt gtgtgttgt gtgtgtgtgt gtctgaggag gtggaccagt ttctcaaaag	1380
gcctgtgacc ccaagaacca aggaatttca gcctgggtg atcacacct cactggtgag	1440
tgggacaagc tgggggcct cgccacagga gcagccagg catggggcac agttggcctc	1500
attcacaaaa tgggagtata agtgatccct gctctggcgg ccaggacgat gagtgggaac	1560
acaccgtgtg ggggctgcct ggctgggtg tgccgcgggt gtcttggtg gtgatggttc	1620
cacctgcttg tgccaccagt gccctctggg tctcacacac aactctcttc ccagcgaagg	1680
cccctcctgc cctcaggcct cagtgtgtct tccgtctcgg aaggccccag gagctcctgc	1740

atcctgggag tgattcctgt gtgcctgcag acccctcgc ggctgccatc tcatcctttg	1800
gtgcacctgt tggccagacc tcctggtagc ggggtgctgca ctcccctgaa tgtgccgggg	1860
cctgggggca gggacctggg ctctccctc actgagtga ggaactcag tgtcttgag	1920
ttggggtgcc tgcaggctgg gtggtgcagg tgaaatgcag acctctcagc tgggtgtcca	1980
gagcagctgc ctccccccgc ccgagggact tcaccgcag cccagtcagg ggtggcgct	2040
gggtgcacgc ccgcaggct gggtaggggt ggagcctggg tggccctgcc tgtgagctgc	2100
atagttgtgc cctttgacct tgagttttct tcgttatctg tttggacctg tttggggcag	2160
gcaggggatg agatctgaag ataaatgcct tagctgtgac catctccttt tgtgagaggt	2220
caatgtccag ttccgctgca gttataacat cccatttttt gatttttttt tattttttcc	2280
tttttttttt tgagatggag tctcgtctctg tcaccaggc tggagtgcga tggggtgacc	2340
tcagctcact gcaacctcca cttctcgggt tcaagtgatt ctctgcctc agcctcctga	2400
ctagcagggg ttacaggcgt gagccaccac gccagctaa tttttgtatt tttagtagag	2460
gcaaggtttc gtcattgttg ccaggctggt ctcaaactcc tggccttaag tgatctgccc	2520
gcctcggcct cccaaagtgc tgagatgaca ggtgtgagcc accgtgccc gcccagaact	2580
ctttaattcc cacctgaaac ttgccgcctt aagcaggctc ccagtctccc tcccctagtc	2640
cctgggccca ccattctgct ttctgtctca atgaatttgc ctaccgtaag tacctcatat	2700
aaattgaatc ataaagtatt tgtcttttta tatctggctt atttcaacta gcataacatt	2760
cttaagtttc atccatgttg tagcatgtgt cagaatctct ctcttttttt tttttttttt	2820
tttttttttt ttttgcagac agagtctcgc tctgtcatct agactggagt tcagtggcac	2880
gatctcgggt cactgcaaca tctgcctcct gggccaagc aattctcctg cctcagcctc	2940
cttagcagct ggaactacag gcgcgtgcc ccatgccttg ctaatttttg tatttttatg	3000
tggaggcagg gtttcacat cttggccagg ctggtctcga attcctggtc ttcaccacgg	3060
gggcccgaag gaccgggca aagcgtggag gggagg	3096

<210> 6

<211> 26928

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (12044), (12489), (26433), (26434), (26435), (26436), (26439), (26441)

<223> Identity of nucleotide sequences at the above locations are unknown.

<400> 6

gaagaccaag ggcacacagc gaggcagttt cagggcgggc agcctggggc cccacggggc	60
ggccccggac acttggtctc acctgtggag ggcagagaag ggaacaggga gagaagtggc	120
cggtctgggag tggaggtggg tttagggttt tactgtaaac taaatgtgta ccctctacct	180
tagttatgaa ttatgagaca cgaagactgc gaaacagaca cactcctcta aaagtgcctc	240
taggctgaca gggagaaagt cccgccaggc tcccagacgc cacctttgag tccttcaaca	300
agccccccag ggctcttgcc ccaccggtgt cagctcagcc actgaaccct ccaggaagaa	360
gacgtgctgg taggagaaga atctcaccca ggcacagcct ggaaggggca cagaaggggc	420
tccggaacca gcaagcccaa gttggaactc ccagtctgct actttctaga acgactgtgc	480
ccttggcggg tctaagtaga acctctccgc gcactctttc ctcttttgta aagtggggac	540
agcaatggcc accttgcagg ttcagagagg gcttgcagta cctcacagaa ctgagtggcc	600
gtgaacgtgt gtgttccctc agatttgtga cagctttgcc aggtctggagt caggctgaac	660
gcctctgccc tcatgggggt tatattctag gaagaccaac aaaaacaaga agacggaaaa	720
ttaaaacaac aaaagcccca ttgacaggcc gtgaagaatg ccatgaaaaa tgaatggcgt	780
tgtgctgcag tctttgggga aacgggctta cggaaagaag gacacttgag ctgctaccaa	840
tgagcagccg tccggtggga gggcagttca ggaagagcag acatccactg aggaggcgct	900
ggggcagagg gcagcctggt cgctggattc gggggaggaa ccacatcagg ccatgagctg	960
gagctggtgg tagaatgtac aggagaggcc agccagggcc agctcatgtc agacctcaag	1020
cggggaagat gaatcgagaa tgcacccac gagcaatggg aagccagtct acgatttaag	1080
cagcaaaaat attttccctt cttccacct gcattcagct ctaccagcac agcctggggg	1140
tctattttca agatagaata gaccagact cccagctctt cttacacttc tactactgcc	1200
acctgtcacc cactcatgcg tccccacttg cagcctcgac ccccttccac ctgatctcat	1260
ggcagccagg gaagctccag ggctcgtgag ggctgccatc tcaggaaaga agcaaaagcc	1320
ttcggcacct gcagggcctg ctccaaccac acttcttctt tgacctctca gcttccttag	1380

ccactccctt cccacatctc accctgctcc agccacagtg gtgtctctgt gggttctcaa	1440
acacaccagg tgcactcctg cctcagggcc tttgtgcttg ctgttctctg ctgggactct	1500
tttttttttt tttttttttg agacagggtc tcaactctgtg gccagggctg gagtgtagt	1560
gtgtgatcgt agctcattgc aacctcaaac tcttgggctc aagcaatcct cccacctcag	1620
cctctcaagt agtttagctt tgttgttttg ttttgagatg ggatctcact ctggtgcccc	1680
ggctggagtg cagtggggca atcttggtc accacaacct ctgcctcccc ggctcaagca	1740
attctcctgc ctacgcctcc caagtagctg ggattacagg catgtgccac cagccccagc	1800
ttatttttgt attttttagta gagacagggc ttcaccatgt tggctctggct ggtcttgaac	1860
tcttgccctc agatgatcca cctgcctcgg cctcccaaag tgctgggatg acaggcatga	1920
gcctgtctct agtagttagg actacagaga ggggccatca tgcttggtga tctctccacc	1980
ttttctgctc caactctttc accccactta gcctcgtggc tcaactctctt acctcttcag	2040
ctctcagtc aggctgagg acccctgttg aaaattgcaa accacacccc ccaccaccac	2100
caccactat tgccagcact ttctaactcca tttctctgct ttacttttct cctttgtact	2160
catcaccacc tgactcatta catgtttaag tatctttctt ctctccacta gcatggaagc	2220
tccaggagag cagagagtgt agttttattc cctgatgtgt ttctgtgcc cgtaccaggg	2280
cctagcacac agtaggtgct cagtaaatgt gtgttggtg aacaaatata gtgaaaggat	2340
ctgatctaca ttataaaga aggcactctg gctgctgagt ggggatgaga ctgtcaggag	2400
gaaagaggcc cctgtggggg cctggccagc aggtgggtac aatggtagca gccaggagag	2460
agggcctctt ggactcaagt ggatggggcc tgctcagggc tccggccaca ggaacaaagg	2520
gaagggggcc caggatggcc tgtcatagag gacacattac aactggcccc aagttcaagt	2580
caggtttcta aatttgggaa gggatacaga aaaactaaag actctactgg acagtcagtt	2640
attgaaatga ttacatagaa aatgtaccaa gaattaaaaa aaaaaaaaaa aagcattatg	2700
aagggggcac cagagactcc cagagaggaa agggactatg ggctggatgc ggtgactcac	2760
acctataatc ccagcacttt gggaggccga ggagggtgga tcacgaggtc aggagttcaa	2820
aaccagccta ggcaacatgg taaaaccccc gtttctacta aaaatacaaa aaattagctg	2880
ggcatggcag catgtgcctg taatcccagc tactcgggag gctgaggcag gagagttgct	2940
agaacccagg aggcagaggt tgcagtgagc cgagattgag ccactatgct ccagcttggg	3000
cgacagagca agactccgtc tctaaaaaaaa agaaaaaaaa ggccagatga ggtggctcat	3060
gcctgtaatc ccagcacttt gggaggccga ggtgggtgga tcacgaggtc aggagatcga	3120

gaccatcctg gctaacatgg tgaaactcca tctctactta aaatacaaaa aattagccgg	3180
gcgtggtggc gggcacctgt agtcccagct acttgggagg ctgaggcagg agaatggcgt	3240
gaacctggga ggcggagctt gcagtgagec gagattgcgc cactgcactc catccagcct	3300
gggcgacaga gttagactcc gtctcaaaaa aaaaaaaaaa aaaaaaatta gctgattagt	3360
tgggcttggt ggcggggcgc tgtaatccca actactcggg aggctgaggc gggagaatca	3420
cttgaacccg ggaggcagag gttgcaatga gccgatatca cgccactaca ctccagcctg	3480
ggcgacagag caagactcca tctcaaaaaa gaaaaaaaaa aagaaagggg ctgtgctgtg	3540
gcctgggacc caaagcacac tactgcaagg tcccagggtg cctgactcca accggagcct	3600
tgagaacatt catttgcaaa gaatgaatta aaattcagca ctattttatt ctgcaggatt	3660
ccagcacecc aaggacagtc attttttagac ccttcagtaa cgtaataagt aaccggagga	3720
tgtgctgagc ttccacttcc ccagacggtt gcctgtcaca gctcatcagg ccaacaaact	3780
tttcttaggc ctcaaatttg gaaatgttca ctctcagttc gttccttaga tgcaagtcca	3840
tcccaatgaa gtaacagggg ctcagcacct gtccaatctc attgcttccg gggacagggg	3900
cccatgagga tgtcgtttca gcccggtgac acttgggcaa agtgcccttt ggtttccctc	3960
ccaggctgga acgtgctggc tctgtgaagt tacgctgggc acaagagccc cccccaaccc	4020
ggcaggactg actgctgtgg tcagaggcgc ccttggggct ttgggagcca cagaatcttc	4080
ctgagggcag cgccggagga ggccccagtg agagtgccca ctgccaggct cattcctcag	4140
gctgccgcag gcctctcccc aaaacaggca atgcttctca gcaacctgcc ccaggagcag	4200
gccaggggag gccgccatcg gcctacagtg ctgggctctg gagggccttg ttggtaacag	4260
gccatggttt ctatgagcca gctgggggtg gaaggacaca ggctggattc acctctctgg	4320
gcctcagttt ctgcattcaa aaagtgggaa tcatgatatc tgctctatct cttatctctc	4380
agtgtgatg tgaacctcca ataagacttt taaaaatact ctttctacct tacttttatt	4440
tttcatttat ttttaagataa tgtctagctg tctcaccag gctggagtgc agtgggtgta	4500
ttacggctca ctacagcctt aacctccag gctcaagtga tctcctacc acagcctccc	4560
aagtagctgg aactacagge atgcaccacc gcacctggat aattttttct tttagacaa	4620
ggtttcactc tgttgccag gctggagtgc agtgggtgcac tcttggtca ctgcagcctc	4680
aacctccctg ggcttaggtg atcctcacac ttcagtctcc caagtagctg ggactacagg	4740
tatgtgccag tacaccagc taatattttt gaaggatggg gtttcactat attgccagg	4800
ctgggtctga actccagggt ttaagcaatc taccttctc agcctgccaa agtgctagga	4860

ttataggtat gagccacccc ccggcctata atcctaccac tttaaaaaag cctgtaattt	4920
tagcacttta aaaaattttt cttaaattttt tatagagatg ggggacagct gtggtctcac	4980
tgtgttgccc aggctggtct tgaactecta ggatcaagcc atcctectgg cctggcctcc	5040
caaagtgttg ggattataag cataagcctt accttacctt ttttttttga gttgcagttt	5100
tgttcttgtt gctcaggtg gagtgcaatg gcaagatctt ggctcactgc aacctccacc	5160
tccccgggtc aagcaattct cctgcctcag cctcccgagt agctgggatt acaggcatgc	5220
gccaccacac ccagctaatt ttgtattttt agtagagatg gggtttctct atatacetta	5280
attttaaagc actgcattca tgtaaattgt gattaacatg gattcaagag agggagtga	5340
gatgaatgag ccaggcagtc acctcggtg tcacctcca cttctctcct ccttctgaca	5400
gtcatcgctc atccgtttct gcagctgttt gtttgactct cctgatcatt ttgcttgcca	5460
cataacttgc ctctgggaa agaatgcctt gggcaggccc acatgagtag tgaaaaataa	5520
tctgcagtga aaaataaaac taagtagtct ggtccacaga gcagtcttat ttttctactg	5580
cagatgaagg agttgacatt caggcttcat tctcatttat aagtgtttta aagacacata	5640
cagtggattg aacagtggcc ttcaaaaaga tgtatctaca tcctaataccc tgggacctgt	5700
gaatgttaac caagttagga aaagggctct cccgggtgtc attaagttag agatcttgag	5760
atgaggagct catcgtggat tatccaggtg gacctgcat ccaaggacaa atggctctta	5820
gaaaagaaaa gcagaggctg ggcacagtgg ctcaagcctg taatcccagc actttgagag	5880
gccgaggtgg gtggatcacc taaggctcat agttcgagag cagcctggcc aacatgatga	5940
aatcccatct ctactaaaaa tacaaaaatt agcaaggcat ggtggcgggt gcctataatc	6000
ccagctactc aggaagctga ggcaggagaa tggcttgcat ctgggaggcg gaggttgag	6060
tgagccaaga tcgcgccact gcactccagc ctgagggaga aaagtgaac tctgtctcat	6120
aaaagaaaag aaaagcagac agagatctga gacagaagag gagagtgaag gaaaaaggc	6180
catgtgaaga tgaggcagag gttggagcca tgcagccaca agccaaggaa tacctggagc	6240
cccagaagtt gcaagaggta ggaagaagcc tcccctagag cctccagacg gagcacagcc	6300
ctgccaacac ctccacctca gacttctggc ctccagcact gtgagataat caactgctgt	6360
tgttttaagc caccagattt gtggtaattt gttatggcag ccacaggaaa ctaatacagt	6420
acctaattct caciaacca tcttacagaa aaggaaactg aagtcagaga ggtagtggct	6480
tgtgcagtgt gttaggccat tcttgtatta ctataaagaa atacctgagg ccgggcatgg	6540
tggctcacgc ctgtaatccc agcactttgg gaggccaagg tgagtggatc acttgaggtc	6600

aggagttaa gaccagcctg gacaacatgg tgaaacccca tttctactga aaatatgaaa 6660
 attagccagg catggtggcg tgcattctgta gtcccagcta ctcaggaggc tgaggcagga 6720
 gaatcacttg cgcgcgggag gaggagggtg tagtgagcca agattgtgcc actgcactcc 6780
 agcctgggag acaagagaga aacctgtct caaaataaat aaaaaacaaa taaacacctg 6840
 agaactgggtg gtttataaag aaaggggtta actggctccc ggttctgcag gctgtacaag 6900
 catggtgccg gcattctgctt ggttgctggg aaggcttcag ggagttttac tcattctgga 6960
 aggcagagcc agagcagggtg catcacacag caaaagcagg agcgagagag agagagagca 7020
 gggagggtgtg cacactttta aatgagcaga tctcacgaga actcaccatt gcaaggacag 7080
 caccaagcca cgaggggtct gccccatga cccaaacctc ccactaggcc ccacccccaa 7140
 cattgggaat tacagttcaa catgagggtt ggggggacaa atatccaaac tatatcattc 7200
 caccctggc cccccagatc tcatgttctt ctcacattgc aaaatatagt catgccttcc 7260
 cagtagcccc ccaaagtctt aactcatccc agcattaact caaaaatccc attcccaagt 7320
 ccaacgtctc atctgaagat gagttccttt cacctacaag actgtaaaaa tgaaaacagt 7380
 tatttactgc tgagatacaa tgggggcata ggcattaggt aaacattcct gttccaaaag 7440
 ggagaaatcg gtcaaaagaa aggggctata ggccccagc aagtccaaaa ccagcagag 7500
 caatcattca atcttaaagc tccaaaataa cctccttaa ctccatgtcc catagccagg 7560
 gcacactggg gcaaggggca ggctcccaag gccttgggca gctctattcc tgcggctttg 7620
 cagaattcag tccccatggc tgctcttaca gattggagat gagggcctgc ggcttttcca 7680
 ggtgcagggt gcaagctgct ggtgatctac cattctgggg tgtggatggg ggcggccccg 7740
 tccgcagct ccactaggca ttgtcccagt ggggactcta tgtggggcct ccaacccac 7800
 atttccctc caatgggaag gctctgccc tgcagcagcc ttcttcttg gctcccaggc 7860
 tttctcatc atctctgac atctagggtg atggtgtcaa gcttccttca ctcttgact 7920
 ctgcacacct acaggcttaa caccacatgg aagctgcaa ggtgtatggc tggaaccctc 7980
 tgaagcagca gcctgagctg tgactatggc cctttgagcc aaggctggag ctggaacagt 8040
 ctagatgcag gcaggagca gtgtcctgag gctgtgcaga gcagcagggc cctgtgcctg 8100
 gacaatgaaa ccattctttc ctctcatcc tctgggcctg tgatgggagg gttgtggaag 8160
 atctctgaaa tgcccttgag gcctttttgc ctctgaggcc tatttcttat tgtctcagtt 8220
 attggcagtc ggctcctttt tagttatgca aatcctctag caagagggtta ctccactgcc 8280
 ggcttgaact cctctcctga aaaagctttt tctttctttg tcacatggcc aggctgcaaa 8340

ttttccaaac ttttatgctc tgtttttacct ttaaataataa cttctaactt taattcattt	8400
atttgctcct gcatttgagc ataggggaatt caaagaagct gggccacatc ttgaatgctt	8460
tgctgcttca aaattttatgg ccacgcttgg tggctcacac ctgtaatccc agcactttgg	8520
gaggcctagg tgggcagatc acgagatcag gagatcgaga ccatcctggg caacatgggtg	8580
aaacccatct ctactaaaaa tacaaaaaaa ttagcttggt gtgggtggcgc agacctgtag	8640
tcccagctac tggagaggct gaggcaggag aattacttga acctgggagg cagaggttgc	8700
agtgagccca gatcatgcca ctgcactcca gcctggtgac agaataagat ttgatctcga	8760
aaggaaggaa ggaaggagga agggaagaaa tgtcttcccc ccagatgtcc tgggtcatcc	8820
ctcttatgtt caaacttcaa cagatcccta gggcatgaaa ataatacagc caaattattt	8880
gctaaggcat aacgaaagtg acctttgctc cagttcccaa taagttcctc atttccatct	8940
gagactcatc acctgggctt tggcttgctc atatcactgt cagcattttg gtcacaatca	9000
tttaaccagc taatcgggag gctgaggcaa gaggatcact tgaaccagg aggttgaggc	9060
tgcagtgagc tgtgatcaca tcaactgcagt ccagcttggg caacagagca agatcctgtc	9120
tcaataaata aataaataaa tacataaata acttaagttt atttaaagct gcacttttgc	9180
caccatggag aaaggccagg ccagctcctt ctctctttct gcacgtgttc ctcccacctc	9240
agctgcctct gtcctcaag gaggaacaga gggagtagga aaggccatcc caggaggccc	9300
agcaccccat gacctggctc tggggccttg tgggtttatg gattcccagt gctgagtcac	9360
ccctcacagg ctcttggtgg caccttggaac attggtcaga agcatgtggt ccccggaac	9420
acaccttttc ctgatcatct gggaagggca gcttggtcca gcgaggccac ctgttcagcg	9480
ccacggcccc ccagacagct gcagccacag ccttgccctt gatcagagca aacaccagac	9540
atgtgtgtca tgcccccaac ccactctccag gggacacatg tcctttcttg ccaggcctga	9600
gatgaacaag agaggggaaa gtccccaagc ctctctctcc ttctgctc acccactccg	9660
ctgttagatt ctcaaggtgg atgggtgggt aactagggca accgaccatc ctgggttacc	9720
tagaactgag ggggcatttt caggaataaa actgcaaaag tctggagcaa acaggagcaa	9780
gttggtcact ctggggctgg tggagtcagg tttccttctg caggccccct ccccgcaagc	9840
atgggtggaa cccaggacag gaacacagag caggccccag gaccgggctt gtcacttaca	9900
agtctttttt tttttttttt ttttgagatg gagtcttget ctgtcatcag ggctggagta	9960
cagtgggtgcc atcttagctc actgcaacct ctgccttctg ggttcaagtg atccccctgc	10020
ctcagcctcc tgagtagctg ggactacagg tggcaccacc acgcccagct aattttttgt	10080

atttctagta	gagatgagat	ggccaggctg	gtcttgaact	cctgacctca	agtgatctgc	10140
cgccttggc	ctcccaaagt	gctgggatta	caggtgtgag	ccactgtgcc	tggccccact	10200
cacaagtctt	aaaccatgcc	tcagcacatc	aatgccatth	acaaaaaggt	agagggatth	10260
tccaggcaaa	aatagatgaa	agacatagga	tgattgatca	tgtcctgctt	aaacataggt	10320
ctgatgctat	taagaattga	gggctgggag	cgggtggctca	cgctgtaat	cccagcactt	10380
tgggaggccg	aggcgggagg	atcacgaggt	caggagatcg	agaccatcct	ggctaacacg	10440
gtgaaacccc	atctctacta	aaaatacaaa	aatggccgc	gcgcggtgac	tcacgcctgt	10500
aatcccagca	ctttgggagg	ccaaggcggg	cggatcacga	ggtcaggaga	tcgagaccat	10560
cctggctaac	acagtgaagc	cccgtctcta	ctaaaaata	caaaaaaat	tagccaggca	10620
tgggtggcgg	cgctgtagt	cccagcaact	tgggaggctg	aggcaggaga	agaatgggtg	10680
gaacctggga	gggtggagctt	ccagtgaagc	gagatcacac	cactgcactc	cagcctgggc	10740
gacagagtga	aactccatct	caaaaaaaaa	ataataaat	aaataagaat	tgtagtatt	10800
ttgcagggtg	gacaaatgat	tctgtttctg	tggcagaatg	ttctcaggag	atctcttttg	10860
aactctcatg	gaaagcatca	tgctgttggc	aacatcacat	ttatttttat	ttatttatta	10920
tttttttagag	acagggtctt	gctctgttgc	ccaggctgga	gtgcagtggc	acaatcacag	10980
ctcactgcag	cctcaacctc	ctgggctcaa	gcaatcctcc	tgctcagcc	tcccaaagta	11040
gctgggacca	caggcgtgag	ccactgcact	cagcccaatg	taccttcaat	atttacatth	11100
ctggcaaagg	tagcaaaacc	ttaacaaatt	ttgaatctag	ataataaaat	tatgaggctg	11160
gggtgcagtgg	ccctgacagg	gatggctcac	atctgtaatc	tcaacattht	gggaggccaa	11220
ggtaggcgga	tcacctgagg	ccaggagtht	gagaccagcc	tggccaacat	gggtgaaccc	11280
tgtctctaac	aaaaatacaa	aaaaattagc	cagacgtggt	gggtgcacgtc	tgcatccca	11340
gctactaggg	aggctgaggc	aggagaattg	cttgaacccg	agaggcagag	gttgtgatga	11400
gccgagatcg	cgtcattgca	ctccagcctg	ggcaaaagca	agagcgaaac	tctctctcca	11460
aaaaataaaa	aaaaataaaa	ttaatgaatt	aattaaaata	aaataaaaata	atggatagtc	11520
actgtaaaga	aaaaataaat	gtatatatca	gccaacaagt	gatggaatag	agcaccctat	11580
ctccctggct	ggacagatac	atcccacaac	acctggaagg	cggtcccatg	tagaacttht	11640
tggactgctt	gaggtgctgt	gctggagcac	ggtgacagag	gagctggacc	atggacctcc	11700
cccgccccc	accaagggcg	aggtccccct	gtggtgggtc	tgagggaggc	atccgtatgg	11760
cctctgcggc	ttgggcaggg	aatttggggg	ccaagtactt	ggtgcaaagc	ctggaaagag	11820

ggtttgggtg ctgagggcat atccctggg ccacatgggg gcagaagtgg ggccccctga	11880
agcttgaggt cctgggcagg ggcattctatt ttgctgtctg aggccttcag tacttgaagc	11940
aaaatggagg cagaatgtcc caccttaatg cccctgattc ctccaaacca attccagaga	12000
cagcaagggc cagaacaggg atggccctgc ccagggtcat gcancgagga agtggccagg	12060
ctgggatctg aaccagggt aatccctccc cttgtctccc tccaggccct caccctgca	12120
tagagccctc cagctcactc atcctcgccc agctccatct cctcagcttg taaaccccc	12180
cgggattttc ctttcttaaa aaacaaaggc ttggccaggc acggtggctc acgctgtac	12240
tttgggggtg gctcccagca ctttgggagg ccaagggtggg cggatcatga ggtcaagaga	12300
ttgagaccat tctggccagc atgggtgaaac cctgtattta ctaaaaaaaa aaaaattaac	12360
tgggcatggt ggctagctac ttaggaggct gaggcaggag aatcgcttga acctgggaga	12420
aagaggttgc agtgagccaa gatcgcgcca ctccacttta acctggcaac agaacaagat	12480
tccgtttcna aaaacaaaca aacaaacaaa taaacaaaaa aaggcggagc gcgatggctc	12540
gcgcctgcaa tcccagcact ttgggaggct gaggcgggag gatcacttga ggttaggagt	12600
ttgagaccag cttggccaac atgggtgaaac cccatttcca ctaaaagtac aaaaatcagc	12660
cagggtgtgt ggtgggtgcc tgtaatccca gctactcagg aggtgaggc aggagaatcg	12720
cttgaaccca tgacctggag gctacagtga gctgagattg cgccactgta ctccagcttg	12780
ggcaacaaga tttgtttctc taaaaaaaaa aaaaaaaga ctggcccttc cccttcagct	12840
cttcctcagg gtccctgagc actctacacc cccgtctaca ctgagcactc caccctgctg	12900
tctacactga gcactccacc ctgccatcta cactgaggac tccacccac tgtctacact	12960
ggctgcctcc cgccctcacc tctgctaag gccattcccc gctgcatctg tcttctagat	13020
tctgcagcct tcagcacgt gggccctccc tttgtccct tgagccacct ccagcctccc	13080
cctgagctgc tactcctctc ccagcagcct ccaccaagc ccctccagtc cccaagctgt	13140
cccttgcatc cagcactgcc cttccacgtg ccccttcct ccagcttcac agcaggggtg	13200
ggcctccagg cctgcccac tgtgccatc cacaagttgt ggtgggagct ccgaggggag	13260
gcaggggtgt gcatggactt gggacgtcca agtctgggac caggggcagc tggttggtg	13320
agtgtggagg gggatagga ctttcaggta gagaggctgt aggggcaaga tcgggacggc	13380
ggatgtccct aaggagggt ctgacctggg aatatattgt cagcttcctc tttgccattc	13440
ctggagctca gacactggcc ggctctcacc ccgcccttc tgaggacac agctccatcc	13500
cagtgagttc ctagtgtaga catctccagc agcacggatg ggaaaggaag tcatcaaagg	13560

tgcccaggac	cggaggcttt	ttctggaggt	ggcagaggag	ggtgtgggtc	tcagggtctc	13620
ggctgagggc	aagcgtggga	ggtcttaggt	ctgcaccagc	cccgtgaagg	cccctcctgc	13680
tccttggtgg	agtcctagag	ggaacagcag	cccctaggct	ctagcaggag	tgggtagggg	13740
cttttctggc	ttcctactgt	gccagcagga	tagctgggcc	tggcactgag	cccaaagatc	13800
acatgccggg	gcattggcgc	agtgaggaac	agacccttgc	caaagctggc	aaagaagacc	13860
ccatgggggtg	cagctggtga	agctgagagc	tcaatgtttg	ggggagcctg	gcaaaagggg	13920
tcctcccctc	cctctgcagg	ccaggatcgc	aggttttccc	tacatgttgg	taattctcaa	13980
acaatcccat	ggccactgga	gcaaagatca	cagtgggcgg	cggcctcggg	agcagtggac	14040
agggcacgca	gtgcctttga	tgccagagcc	ctgccccaa	agtcaacaaa	ctctgcagcg	14100
gaotttgcac	cgggactttg	ttttcaccat	acaaggaaag	ggacagatca	caggccctct	14160
cgtgcctc	gctgagccgg	aagctgcagc	gtgagctctc	tcaagcccca	tttctaggtt	14220
ccccaggcgc	accctgagc	cctactcgc	ctattaagtt	ctcctaatag	cccttcaagg	14280
tcttaatgta	tgtccattag	acagagggga	aaactgaggc	gagggcaagt	gacttgaccg	14340
aggttcctcg	gcgagcaggg	cgtggagctg	agaacctcgt	tattactgct	ccccacacaa	14400
ccctctggcc	gttcttgga	gaaggctgag	ccccgggggg	gccagagtga	cccaaacacc	14460
atgggcccgc	tgcggttaaca	cgtgcggcca	cgaaggggca	gcagtttccc	gcccggccgg	14520
gctctctccg	gcgctcagta	tccgtcccag	gccaagaaga	agaaactcgg	ggaggagggc	14580
ggagggggct	gcgtgggagg	gcgtggaaga	tggacgtggc	caggggagtg	gcagctgcac	14640
acagtggatg	ctgttaagat	gaagggaaag	aacgtgggct	ccgagatcac	tggacacggt	14700
tccaccttcc	ttcccgtca	ctgcatggcc	ctgggcgggt	tgttgaacct	ttggaaacct	14760
gtttttcctt	ttttcctttt	tttttgagac	agggctctgc	tctgtggccc	agactggagt	14820
gccgtggcac	gatcttggct	cactgctgcc	tcccagggtc	aagtgatcct	cccagctcag	14880
cctcctgcgt	agctgggacc	ccaggatatgt	gtcaccacag	ccggctaatt	tttgatattt	14940
tttgtagaga	cgggatttcg	ccgtattgcc	caggctggtc	tcaaactcct	gagttcaccc	15000
gatcttccctg	cctcagcctc	ccaaagtgtc	gggattactg	gcatgagcca	ccgcacccag	15060
cagagacctc	agttttctaa	cctgtgccag	caggaataat	gatagctgcc	tagcttggtc	15120
gtgctgggaa	ttaagtaaga	tgaccgggta	gcaaatatga	agtattactg	gacacagagg	15180
gccccaggct	gggttagcag	cggtggtcag	ggctgctgct	tcctggcctg	agctcgaagg	15240
agggccctca	ttaccacctg	ggtgagtcct	cgtccaagcc	tggcactgct	gcgtgggaat	15300

aacttctgcc acccaagttg gcagattgtg tgcaaagtta agtcctgact ctgtggggtg 15360
gacttcgagg cctcttcac cggactgctt cgggtgactg cattcgcacc tctcctgtt 15420
cctgggttaa cacagcccag ctttctctct gctgagccct cctgggctt gctgtcacc 15480
tcgtgccgct gtgcctcgca gtgccactcc ctgtaccctg aatactttgc cctgcctctc 15540
caccagctg agagtcaggg cccctgtgag gctctgccc gcccgctctc cgggtttctg 15600
cctctgctga gcatttcct gcattgattgc ttctgagagt ccccccagcc tgtgagcttc 15660
tcaggactgg gacagcttct caggaccgag gcttctgtgt ctgcttgcaa ttttacaggc 15720
gggcacattt tcccttgcc aacatcagag actggacatc tgcagatctg tgctagccac 15780
tgagcaccca ggcacccag caggtagctc tgtaaccaac ccattctgta aagctgaggc 15840
tcagagaggt gaagcgctg gcctggggcc acagcctgcg tcagctgcag agccaggagc 15900
tgagatatgc acctgcggct ctgctcacag ggtcctgcac agactgctgc tggagccacc 15960
tatgtagagt caagagagtt catgttaact cctctcaca tccctcagcc aggggtgggg 16020
ctgacgatag aactcaggg atggcctacc ctcccaca acccccgctc gggttgccgg 16080
atctccttgg aagaaaagtt ctgggcagaa ttccaccgtt ggctggcct acactctcct 16140
tagtggctta ggaccctcag cgggtggataa gttgtgggca gaagagatgc aatcaggatt 16200
ctcaccact cacccttgc cagcccaat aagctcaata agctgggctc ggtctgagga 16260
agtgtccagg aaatgtgcaa atggcctggg acagccctgt gttcctttca gtaaggttgc 16320
tgaagggtgag gctgaaagtt ggagaaacag aagccagtgc ttatggtttt aattaagata 16380
atggaatgta tgtatgtatg tatgtatgta tgtatgtatt tatgtattta tctttagaga 16440
tagagtctca ctctgttgcc caggctggaa tgcggtgaca caatcatagc tcttgcagc 16500
ctcgacttcc tatgccc aaa tgatcctct acctcagcct cctgagtagc tgggactaca 16560
gacacacgcc aactatgcct agctaatttt tatttctatt ttttgtggag actgggttct 16620
cactttgttg ccaggttg tcttgaacct ctagcttcaa gcaatcctcc tgccctagcc 16680
tcccaaagtg gagggattac aggtgtgagc caccacacct ggctggaat ttatttgtat 16740
tctgcttata aaattaatac attcttattg cagaaaagtt tgaaaataaa agaaaggaca 16800
aagaacaaaa agcgtatata atttcacagc tcagatctca ctgctattaa catttttatt 16860
tactttcagg cttttttctt tctaggtaca tatgcagaga ttattttatt ttattttatt 16920
tattttatat tttattttat attttttatt tcattatttt attttatttt attttattat 16980
ttttagagac agggcctcac tctgtcacc aggtggagt acaatggagt gatcatagct 17040

cactgcagcc tcaaacacct gggctcaagc aatcccccca ctcagccttc tgagtagttg	17100
ggactaaagt gtgagtctgg ctaatTTTTT ttactTTTTT tattgacaga ggtctcacta	17160
tggtgcccag gctgatctca aactcctggg ttcaagcgat cctcccacct tggactccca	17220
aagtgctggg attacaggca tgagccacca tgcttgccct aaaatgccac tttttgtcat	17280
ttactaaaat cccatggaca ctttgacatg tctgtattct atgctattga tctgactgtt	17340
ggcatctaca tcattatggc catctatcat ctatcataat ccattttaac attaaaattg	17400
tgctgctgct tagatTTTTT tggcctgtct cctatttgta ttcttccaga taaattttag	17460
aatcatttta tcaaattccc cttgcagaaa aagccctatt ggattttggt tgaaaaatac	17520
tgaattttta cattaactta ggaaagggtt gggcacggtg gctcacgcct gtaatcccta	17580
cacttttoga ggccaaggca ggtggatcac ttgaggttgg gagtttgaga ccagcctggc	17640
caacatgggtg aaactcggtc ttactaaaa atacaaaaat tgccaggcgc attggctcac	17700
ctgtaatccc agcactttgg gaggcgagg tgggtggatc acgaggtcag gagatagaga	17760
ccatcctggc taacacggtg caaccccgtc tctcctaaaa atacaaaaaa ttagccaggc	17820
gtggtggtgg gcgcctgtgg tctcagctac ttaggaggct gaggcaggag aatggtgtga	17880
accaggagg cggagcttgc agtgagccaa gatcgcgcca ctgcactcca gcctgggcga	17940
cagagtgaga ctccatctca aaaaaaata ataataataa tacaaaaatt agccgggggt	18000
cgtggcgtgc acctataatc ccagttactt gggaggctga ggcaggagaa tcgcttgaat	18060
ccaggagggtg gaggttgcaa tgagcagaga tcgtgccact gtactccagc ctgggtgaca	18120
gagtgcact ctgtgaaaaa aaaaaaaaaa ttctgaagga ttgagactct tagactctta	18180
gggtcttcta tccaagagca caatatagct tttcatgtat tcaagccttt ttcaatgcat	18240
caacagaatt ttacagtttt tttcatgata tctgctatt tcttataaaa tgtattccta	18300
gatattctgc atgttttccg gttgtttgtt aataaatatt tttcatttgt cattatttcc	18360
taattggctg ttatttgtat atatgacatc tgttgaattt tttgattact ttgaaaatgg	18420
ccattctttt gtgttttttt ttaactttct attttgagat aattttgact tacagaagat	18480
ttgcaaaaat agtacagaga gttcctgttt ccccttatg ttaaccagt ttctccttat	18540
gttaacatct tacataacta cagaacaatt gtcaaatcta agaatcaacc tgggcacaat	18600
getattaact aaactgcaga agctgttcag atctcaccag ttcttctact gctccccctt	18660
tctcttccag tgttcaatcc ggaatcctac attatattta gttgtcattt ctctttggtg	18720
tcttccaatc tgtgacagtt cctcagtctt tctttgtctt tcatgacttt cattttttta	18780

tacttttgaa aaatactggc cggttgtttt gtagaacgcc ctcagtttgg gtttgccctga	18840
agttttttgt gattagatcg aggtcatgca ttattggaga gggtgccacc gcctcgatgt	18900
gcaagctcaa tgcacatat cagaggggtt gtaatgtcag tttataccgc cggagaccct	18960
aacctggagc atttcgtgaa ggtgctgtct gccaggattc tccactagaa agttactatt	19020
tttccctttt taattactga atgtctgagg ggaaatactt tgagactatg caaatatcct	19080
gtttctgctt taacttcggc tactaagtt tagcattcat ctatggatct cgcttatagc	19140
aagtattact gtggagttct aatggtaatt ttctgtttct ctcattcctt caacctttat	19200
taatatgctt ctctctact tattcatttt gtttcagttg tttataccaa catggatttg	19260
tggatattgg ttttattctt tgggttgcaa ttgaatccta tcattatttt gttagtcagt	19320
tgttccatcc gaccttggtc attaggagcc cttgaaattt ggctcccatg cttttttttt	19380
tttttttgag accgagtctc actctgtcac ccaggtttga gtgcagtggc atgatcttgg	19440
cttctgcaa cctcgcctc ccaggttcaa gcaattctcc tgcctcagcc tcttgagtag	19500
ctggtattat aggcgtcca ccacctgccc cggctaattt tttgtatttt tagtagagat	19560
ggggttttat tatgttggcc aggctggtct caaactcctg acctcaggtg atctgcccgc	19620
ctcggcctcc caaagtgtg ggactacagg cgtgagccac cacacctggc ctctatgcc	19680
attttaacat gcccgtcttt tctttttctt tctactttc tgtgactgta agaagctcca	19740
ggatacattt ttgctgcctt agacttagcc tcaatcagtt ctcagaaaag ctctggttct	19800
ttttatggga tacttagaaa actagctctg tatggcctgg cgcggtggct cacgcctgta	19860
atcccagtac tttgggaggc cgagggtggc agatcacaga tcacgaagtc aggagatcaa	19920
gaccatcctg gctaacatgg tgaaactctg tctctactaa acatacaaaa aattagtcca	19980
ggcgcggtgg cggcgccctg tagtcccagc tactcaggag gctgaggcag gagaacggca	20040
tgaaccggg aggcgagct tgcagtgage cgagatcggc agccactgca ctccagcctg	20100
ggccacagag cgagactccg tctcaaaaaa aaaaaaagga aaaagaaaaa agaaaactag	20160
ctctgtatgc tagttttttt tttaagacag ggtctctctt gcccagctg gagtgtagca	20220
gcacgatcac agctcactgt agcctcaacc ttctgggctc aagcaatcct cctgcctcag	20280
tctcttaagt agctgggtct acaggcatgc accaccgtac gtggcaattt ttaaaaaactg	20340
ttttagagaga tggagtctcc ctatgttgcc tggcttgga ctcttgccct caagtgatcc	20400
tctgctcctg gcctcccaa gtgctgagat tacaggcatg agccactgta cctggcctgg	20460
ccaaggctctg tcttttttta aaagaagttg ttgtatagtt gttttttttt ttattttttt	20520

ttctgagacg gagtctcgct ctgtcgccca ggctggagtg cagtgggtgcg atctcggtc	20580
actgcaagct ccgcctccca ggttcacgcc attctcctgc ctcagcctcc cgagtagctg	20640
ggcctacagg cgcccgctac cagccccggc taattttttg catttttagt agagacgggg	20700
tttcaccgtg ttagccagga tggctcgcg ctctgacct cgtgatccgc ccgcctcggc	20760
ctcccaaagt gctgggatta caggcgtgag ccaccgcgc cggcctgttg tatagttttt	20820
atctcgagtt ttctagcgat ttaatcatat tggttacaaa aaaggatgat ttactacct	20880
cctttccaat gtttctacat attttttcat tttatctaac tgcattttaa aataaacttt	20940
taattttaga atggtttcat atttacagaa aatgtgcaaa gatagtacag agagtctctg	21000
tgtactccac acccggtttc cttattatta tcttaacgtg atacacaatt aataaaccag	21060
taacattatt attcactgaa gtccacactt tctttttttt tttttctgag acggagtcta	21120
cttctgtcac ccaggctgga gtgcagtggc gcaatctcgg ctcaactgcaa cctccacctc	21180
ctgggttcag gcaattctgt ggctcagcat cccaagtagc tgggaataca ggtgccccgc	21240
accacgcccg gctaattttt tgtattttta gtagagatgg ggtttcacca tgtagccag	21300
gatggctctg aactcctgac ctcgatgctt gcctgcctca gcctcccaaa gtgctgggat	21360
tacaggcggtg agccaccgcg cccggcgctc atactttctt tagatatcct tcctttttac	21420
ctaacgtcct tcttctgggt caggatccca tccagaaagc aacattacct ctcgccatca	21480
cgtcttcaca ggctccccct gacgggaaga gttcctcaga ctttccttgt ttttgttgac	21540
cttgacagtt ttgaggagga ctggtatctt agtctgtttt gtgctgctat cacagactag	21600
ctgagaccga tacatgatac atgaaaaaaaa atgtattctt acagttgtgg aggctgggaa	21660
gttcaagacg aagttgctgg ttggtttggt ctctggtttc aagatggcgc cttgctgctg	21720
catcctctgg agaagaagaa tgcggtgtcc tctcactgca gaagatggaa gcgctaaaag	21780
gaatgaactc cctttgccaa gccattttat aatgggcatt aatccacaaa ggatgaaacc	21840
ctgagaaaca tcaagcttta aagcactggt tctcaacctt tttggtctca ggagcccttt	21900
atactcttaa aacgttttga ggatcccaaa aaaaggcttc tacaggttcc atcttttaat	21960
atttaccata tcaaaaatta aactgaaaaa attttaaatt atttattcat ttaaaataac	22020
aaggataaac ccattacatg ctaacataaa tcatgtatct tatgaaaaat agctatatct	22080
atcaaaacaa aaattagtga gaagagtggc atgtataatt ttttttggtt attttttggt	22140
tttagatgga atcttattct gtcgcccagg ctggagtgca gtggtgtgat ctcggctcac	22200
tgcaagctct gcctcccagg ttcacacat tctcctgcct cagcctcctg agtagctggg	22260

actgcagggtg cctgccacca cgcccggcta attttttgta tttttagtag agatggagtt	22320
tcaccgtggt agccaggatg gtcttgatct cctgaccttg tgatccaccc gcctcagcct	22380
cccaaagtgc tgggattaca ggcttgagcc actgcgtctg gcctaaattt ttgtgaatgt	22440
ctttaatgcc tgccttctca tatttgtttc tgcattcaag ttattgcaaa atgttggtgt	22500
ggttgaagtt tgtaaagaaa atgtggcctc atacagttgt gtagttggaa aggcaagagt	22560
attttgattc tctcttcaaa caactatgga caacctgctg ttacaaaacc agaatgcaaa	22620
aagttgtagt aaatacaggt taggtgtagt gtggaatctg aaagcatgtg aatgaacttt	22680
ctgagttttg taacattaaa gtccagttgc gttaagctac tgtgatagca tatagcattg	22740
tcctaatact ggaattagta tcagaagtgg ggtgctactg ttaataaata aaaagaaata	22800
aataaatcat gtgatactgg ctcagaagtc aggcagtagg ctgtgtggaa cctgacatca	22860
cgccatgtaa tacattggca accatttgat ccagctgtct gtcattgatga cttggaaagt	22920
caaccacata cttacagagc ctgtagacat aggggaaaat agtataaac agaatactaa	22980
cagtggacct tggttcttgc cagttgcatt tagccaaata ttaaacaaaa gagatattct	23040
tgggcagcaa ctggaccatc ttcaagtaaa agtgaaaggt aataaacaga gtccagacat	23100
ttgtgcccac gcggttgaag aaaaatccag ttgcttctag acaccgtata tgaaaacaac	23160
gtgaaaaaca agcctttgag tggtaaaggc cgattaacac tcagcgcggt aacaaagacc	23220
aggtgggcta acccgaaatg aaatgagaag cctgtggtga tgaggaggca gagaagtaaa	23280
atcaagtttg agcatttcgt ttaggagagt ttgggctctg attacttgca catgcaaacg	23340
aactggaaac aaacagatca gatgtctacc acttcttcga gggaattgca ttgccaaaga	23400
agtcattgaaa gcagactcta tactgattag gcattaaaac aaaaacaatc tttaggcccc	23460
taaacttgca tgggcaggaa gtgggctgtc aaagctgttc atcctctaag gtggacctag	23520
ttcctagtcc ccagtataca cttcagatgt ggccctggag gacactggac atggaggacc	23580
tcccagagga tgaggctagg gcttcatttc tccaatgacc tcagctgect ctatttcccc	23640
ttcttctctt ggaagtcta tcacgttat tattattatt atcatcattt ttattttgag	23700
ataaggtctc gctctgttgc ccaggctgga gtgcagtgc atgatcatgg ctactgcag	23760
ccctcccagg ctcaagtgat cctcctgcct cagcctcctg agtagctggg agtacaggca	23820
catgccacca tgcttggtca tttttttttt cagtagagat agggctctca ctatgttgcc	23880
agggtgatc tcaacctcct gggttcaaga gatcctccta cctcagctcc tgagtagctg	23940
ggattcgggt gcacaccacc atgccaaacta atttttaatt tttttttgta tggacaggat	24000

gtacagtgtt agaaatggat tgcttgcaga ggcaggagga tcacttgagc ccaggagttt	24060
gatcacactg tgaacctatga tgcacccct gcactccaat ctgggcaaca gagtgaagacc	24120
ttgtctcaaa aaaaaaaaaa aagagagaga gagagagact caaagatagg caaaaaagt	24180
ggaaagcttt atagtggaca aaaaggaacg ctctaagtct gccctattgg catggtgctg	24240
aagtggtggt aactagagat aggggggtact atgtggttga ctatgggtgc atctttggt	24300
ttccctgggt gatcctaagt tggaagcagg gacaaaaatt aggggaagctg ttagttatc	24360
atcagttctt ggcagtagtg gactggttgt gatagaagtt attgttttgg ccagggtgcg	24420
tggctcatgc ctgtaatcct agccctttca gaggttcaacg tgggtggatc aggaaggagg	24480
gaggatttgg gaggtcagga gttagcctgg ctaacctggc gaaatcccat ctctactaaa	24540
aatacaaaaa ttagctgggc gtggtggtgc atgcctataa tcccagctac tcgggacgct	24600
gaggcaggag aatcagttga acctggggag gcggaggttg cagtgaacca agatcgtgcc	24660
caatttcac tcacaaaaaa aaaaaaagt atcgtttagc ttctcgatt gttactggac	24720
gtagtaatct ggcttctgc aagtctaact ttcagcagac tggctacatg ggctgtgtac	24780
tgtagataag gcagtaagta aagcaaaaat tgatagagca tcaaggataa atagaaaatc	24840
cgtaatcaag cagaagattt gaacacttca ctttcagtaa ctgataaaac aagtagacaa	24900
aaaaaatcag taaggatgta gaagatttga acaacgtaat taacaaactt gacttgattt	24960
acacgtctag aacctgcag aacacacact ttttcaagca tactcagaac atttatataa	25020
agtgaccata tgggtggacca taaagcagtt tcaacaaatc tcacaggagt aaaataacag	25080
accgtgtttt ctgaccgtaa gtacagttaa cctagaaatt gaaaacaaaa agctagaaaa	25140
accccatgta tctggaaatt ttaatatata ctttgaaata acaaatggat cagagattaa	25200
ttcaaatagg aatttagaaa taccttgaac tgaaaaataa tgagaatact ataccccaaa	25260
actgtggggt gcagctgaac agtatataga cgaaaagtat actcatatgt gcatacctta	25320
aggagcgggg aggattgaaa gttaatggga ggcaaaagca ggtggatcac ttgagggttag	25380
gagttcaaga tcagcctggc taacagggtg aaaccccatc tctactaaaa atacaaaaaa	25440
ttatccaggc gtagtgaggc tgaggcaaga gaatcggttg aaccaggag gcagaggttg	25500
cagtgaagcg cgattgcgc actgcacccc agcctgggag acagagcgag actccatctc	25560
aagaaagaaa aaaaaaaaaa aaaaggccag gcgcggtggc tcatgcctgt aatcccagca	25620
ttttgggagg ccgaggtggg cggatcacga ggtcaggaga tcgagactat cctggctagc	25680
acggtgaaac cccgcctcta ctaaaaatac aaaaaatta gccaggcgtg gtggcgggtg	25740

cctgtagtcc cagctactca ggaggctgag gcaggagaat gtcatgaacc caggaggcag	25800
agcttgagct gagccgagat cgcgccactg tactccagcc tgggcaacag agagagactc	25860
tgtctcaaaa aaaaaaaaaa gttaatggga taaacatcca tctcaagaag ttagaaagga	25920
atgacaaata aaccaaaaaa aaaaaaatca aaagaagaaa atcataaggt caagactata	25980
aagagagtgg ctgggtgcag tggctcaggc ctgtaatctc agcatttttg gaagcagagg	26040
tgggcagatc acttgagccc aggagttcaa gaccagcctg agtaacatag agagacctca	26100
tctttgctga aaataaaaat aaaaaattag ccaggcatgg tggtagtgag gtgggaggat	26160
cacttgagcc taggaggttg aggctgcagt aagccatgat tgtgccactg cacttcagcc	26220
tgggtgacag agtgggaccc tgtctctaaa aaactaaaat aaggctgggc gcggtggctc	26280
aaatctgtaa tcccaccact ttgggaggcc aaggctgagg tcagcagttt gagaacagct	26340
tggccaacaa gatgaaacct catctctact aaaaatacaa aaaattagtt ggggtgtggtg	26400
gcatgtgcct gtaatcccag ctacttagga ggnnnnctnt ngattatatt ttctccttcc	26460
tacgtcgta ttggactgaa ttcagaatga tgactctcat tggagctctt cctgtctcct	26520
aactacagtg gcttcgcacc ccactctggg ttctacttca cccctctgct gctcatagca	26580
gtagatactt ccttccttct ttctcacttg ttgctcttcc tcaaccccc cgttggtgt	26640
cccctcctct ttatcttttt ctgcgcacac ctgcgttctc ttgccctctt atcatccctt	26700
tctcgaggcg gtcccttctt ttatccagct taaatacctt ctctctgttt tatttggggg	26760
ttgggttttt atctctcacc ctccctctaa ttctcttctt ctttccgcac ccatcaagcc	26820
tctcggtggt ttctcttctc tactctcggg tccccccct ctcccttctt ttttttctt	26880
acccccccaa gcgctttgcc ttttttttct ttgcccttta ttcccccc	26928

<210> 7

<211> 29430

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (4336), (4345), (4349), (4392), (4447), (4490)

<223> Identity of nucleotide sequences at the above locations are unknown.

<400> 7

aggggaaggg ccggctccgt agctcacacc tataatccca gcactttccg aggagagagg	60
atcatctcag gccaggagtt caagaccagc ctgggcaaca cagcaagacc gcacatctctac	120
aaaaacttct tttaaagctt aaaaaaaaaa aaaaaagcaa agaggacagt tcaggagaaa	180
agcctgtaga ggcagcacac taaggaggag acgcagccca ggcaccagga ggggctggcc	240
atgggcactc actcctccag caggcgagtg cccagcacca gctggcccac ccagacaccc	300
aggacacggc ctgaatggct ccgtattcac gtgggtggta ataaacaagc aatacacata	360
gccaataagg acaccttagt aatgttacat cataaacgct gcagatcagg gaaatgggtg	420
aggggtgaagt ggggtggggg gctgcatgct acatgagaag tgggtcgggg ggctgcatgc	480
tacctgagac agagcaggcc ttgctgggaa agaaggagcc ggcaggcctg ggcaaaggtc	540
ctggggtggg agcacactgg agcagagtgt gggggtagca tggcgggtgc tggctcctctg	600
ggcgccctcc caccacgtca tgtgcccattg tgcccaaggt ctctcgtttc acagccccct	660
gaagctcagg ggtcacagct acacagcccc cagatacctt ggctgcccc aggtcattcc	720
atccagtgat ggacctgctg acctctagcc tgacctctgg gcagcgtaat ttgagaagga	780
ggagaaggga gggcaacaga cctggggcga tgagggatgc acagggtggc agacacctga	840
ggctgcacct tggagcctca gttctgggtg tgggtggggg atggacaggc tgagggctga	900
agcagctggg cccggccacc atcacacccc aggaccacc agatcaccat gaaaaaccga	960
atgtcaactg gcagcccaga gtgcagaaca aacctttcag aaacacggtg gtgactgccg	1020
catcatgaac ataaaataat tacgcctctc cccagggat caccctgca ggagtttgtc	1080
ccaagaaaca ccagaaagaa ggaaaacgtc tgagtcacaa tatttgctga ggccttattt	1140
gtaatagcaa aaaaaaaaaa aaaaaaagaa caatctccag cggcaggggt aactagacta	1200
ttgtctccgt ggaaaggtag caccaattaa ctagtaacaa aatgactgcg gtaacaacaa	1260
aacgttcgac atgtcaacac caaaaaccac acaccagca taaccgtgaa ccatgatttc	1320
tactagaatg aatggcagtt atgagaaagc accagcggag acaaagattg aaaaagtaaa	1380
gggtggcctca ttagggagac aagtctctgg gtaatatatt gtaatactgg taaatatata	1440
gtttttaata tattttttta ttccaaattc catatatgtt cctatgaagc tatttctgca	1500
aatatttttt tcaggaccgt acatcacaaa ggcaaaaggg ccaggtcagc tctccagctg	1560

agagtgacca	cttcagagca	gacggcagac	tccaggggta	gcaagcctgg	ctgagacctg	1620
gcccattgaca	atcactcaac	ccctctgacc	tcaacatcct	gtctgtgaaa	tggggataat	1680
tactgcacct	ccacatcaca	gagtgcgagg	cttaaacagg	atgcttcata	gaaaagcgct	1740
caagaggtaa	cagccgggag	ggggtagtgg	ttttcattaa	ttaaatgttg	ccttcaccca	1800
gccttggggc	agctccaaca	caaagcacac	accatccact	cagactcagt	tgccctggatt	1860
caaagcccgg	cctggcctcc	agctgtgaga	ttccgggcag	gatttcccat	ctcccagagc	1920
ctcagtttcc	tcattcatga	aacaggaagt	gatcattcct	tttattttta	tttttatttt	1980
tatttttgaga	cggagtttca	ctctagtgtc	ccaggctgga	gtatgatggc	gcaatctcag	2040
ctcactgcaa	cctcggcctc	ccagtttcaa	gcgattctcc	cacctcagtc	tcctgagtag	2100
ctgggattac	aggcacacgc	caccacgccc	agctaatttt	gtatttttag	tagagacggg	2160
gttttgccat	gttggtcagg	ctgggtctga	actcctgacc	tcaggatgatc	cgcccgccct	2220
ggcatcccaa	agtgtctgga	ttacagggtg	gagccacca	gccagttga	caactgcttt	2280
taaagacacc	tctggctgct	gtggaaaaca	gcctggtagt	gcctcaaaaa	gttacacata	2340
gaatgatcct	atgaccagta	attccactcc	tacatatata	cccaaaagaa	ctgaaccctt	2400
ctactcatgt	atgtacacat	acaggtaac	gcattgtaac	agcagtgttc	acaaagccaa	2460
aacatggaaa	cagctcaa	gtccataacc	gatgaacgga	taaatgaaac	gtagtctatt	2520
caccacctga	cggagggtgag	agggggccata	aaaaggaatg	atgcataaaa	acgaatatta	2580
tggccaggta	tgggtggtca	cgctgtgaat	cccaggactt	tgggaggctg	aggcgggcgg	2640
atcacgaggt	aaggagtctg	agaccagcct	ggccaacacg	gtgaaacccc	atctctacta	2700
aaaatacaca	aattagctgg	gcattggtga	gggcgcctgt	aataccagct	actccggagg	2760
ctgaggcaag	agaatccctt	gaacctggga	aacagagggt	gcagtgagct	gagattgcac	2820
cactgcactc	cagcctgggc	gacagaccaa	aactccgttt	cggaaaaaaa	agaaaaaatt	2880
agccagggtg	gggtggcggg	gggtccctgt	aatcccagct	ctacttggga	tactgaggca	2940
ggagaaccac	ttgaaccggg	gaggtggagg	tagcggtagg	ctgagattgt	gccactgcgc	3000
tccagcctgt	gtgacagaag	gagactctgt	ctctaaaaaa	caaaaacaaa	aaaggcccgga	3060
cgcggtgtct	tacacctgta	atgccaacac	tttggaagc	caaggcaggc	agatcatctg	3120
aggtcaggag	tttgagagca	gcctgggcaa	cacggtgaaa	ccccatctct	actaaaaata	3180
cagaaattag	ccagggtgtg	tggcacatgc	ctgtaatccc	agctactcgg	gaggctgagg	3240
caggagaatc	gcttgaaccc	aggaagcgga	ggttgacgtg	agccgacatt	gcaccattat	3300

actccagcct ggggtgacaga gtgagattct gtctcaaaaa aaaaaaaaaa aaaaaaaaaa	3360
ctaaacaaaa gcaaaaaaac caatgagtaa tgttgtaag tgaacttcat cccaatggga	3420
atgcagataa tttgttttaa aggcaccatg cactctgggc aggctggctt cccctgggaa	3480
cgtcttcttt tgcttgatt ccagttggt ttaatcgggc gtagaactt ttcttcaatc	3540
cgggattcag gcacctg gcacacaaa ctgagcacac cccgactct gctgtgggtt	3600
cttggcacta ttaggagaat gtgagggggt gattcagatc tatctctagt ggggtgcatgt	3660
ctgccactcc caggaacgcc cacttctggc aagtcagtgt cagagaaagg ccagctcgtg	3720
gccccctctg ccttgagtcc caggacctgt gatcagtcct acccgagca gaatcaggag	3780
tttgaaaacc caagtgccaa caatctcatt ttaacctatg taagcatatc caatatttat	3840
atatagaatt cataacagat gtctgggctt ccattccaat agcctatatt ttacactgtt	3900
tatttacatg gttacaccaa acaagactca attcaaggta acccaatcct ttgctactat	3960
acaaaaataa gcaacatttt cagtccatgc cttatatata ttcaccaagc attacactag	4020
gcctccaact gctcatcgga gcaagctgca gcctggacac aagctagaga ttaatcagtc	4080
aggaatgatc ctgctccag tgccagcatg atggaagaga cagagaaaca gaagacatca	4140
gggctccaga gtcaaggagc ctgcagggtta gttgggcagg atatacacac atacacacac	4200
acacgcacac acaaaaccac ccaagaagaa aagggtggat gaatgcatgg acaggtaatg	4260
cctggagcct ggggatggat aagctgactg cagggtggcc aggcaggctt cctggaggaa	4320
gaagacctgg ctgtangtgg ggtangcang ctttctaaat ggggaaaatc tggtgtggg	4380
tggagtggc angtttccga aaagaagaaa agctgactat gggtagacct ggctgttgg	4440
ggaacangca ggcttcttgg aagaagaaaa tctggctgtg ggtggatcan gcaagcttct	4500
tggaagaagt aaacctgact atgggtggac caggcaggct tcctagagga agaagaccgg	4560
ctgtgggtga accaggcagg cttcctagac agaggaagat ctggctgcgg ttagagtggg	4620
caggcttcta agaagaggaa gggctgactg tgggtagacc tggtgtggg tagactgggc	4680
aggcttctg gaggaggaag agctggagca ttgaaaaaca aacatgactt ggtgaatgtt	4740
gagcatgccc aggcctgatc ccagaggca attacgcact caagttactt aattctactc	4800
acaatgcctc acaaaacaact tctctgacac ctaacacagc tctgggcacc ttctagcttc	4860
agctcctcaa agcagttatt cagctacta cctgcacac ctctcacac cccaacccca	4920
gggacaggag ttctgccaga tgccaaagct cctgatgcca aagcctgggt ctgcttccgg	4980
gtcctcttg gtctaactgt ccaccccgca tcggcatgat gtgcaaaaac aaggctttgc	5040

aatctgccct gatgcctggc ggagcgagtc cctcccgatt cgtctccttc agaaacacct	5100
gggctgccct ggtcctgtta tcccccaac acattctaca gtcagctccg caagttccac	5160
aaagatcaac gctggcgttt ttatggcatt ttatttacag tttttacaat ataaaaaagg	5220
aaggatgcca cagctcagcc agcaggacag acagagatct atgatgcttc tgctgcacca	5280
ttgtttgtgg tcaagaaagt ctgttttcaa tgatttatta aattgtgggtg ggagatggat	5340
ggtggcagtg gttaccagca acatgaatgt tcttaatgcc actgaacttc acacttacia	5400
atggttacga cgataagtgt tatatgtatt ttaccacaat taaaaacagg taaatgcagg	5460
cggggcacgg tggctcacga ctgtaatctc agcactttgg gaggccaagg caggcagatc	5520
acctgaggtc aggggttcga gaccagtctc gccaacacgg tgaaactctg tctctattaa	5580
aaatacaaaa attagccaga tgtgggtgggt catgcctgta atcccagctt ctcaggaggc	5640
tgaggcagga aaatagcttg aaaccgggag gcagagggtg ccatgagctg agattgtacc	5700
attgcactcc agcctgggtg acaaaagcaa aactctgtct caaaaaaata aaataaaata	5760
aaaataggta aatgcaaaca tatggtatag taatattatg ggctattatg agctacaaaa	5820
aagaatgact tgggactaca gttacagccc tcattcagga atttgtttta aatgtgggtt	5880
ggtcgctaag gcatgtacac aacattttga cgttcaaata ttcttagatt tggacagtga	5940
gcacccctct aagctggctc ttctgtccca gaggtcccca ccagtccctc agaacttctt	6000
tgctttctta cacaataaga tgcccatgc tcggcttgta cctttccttg cccagccct	6060
agaaccagct tcttcgtgga caagctctga ctcccttggg tggagaatgg tattcagaaa	6120
cccagacctg ggctctgggtg tgctcactgc tacttgggggt cattgcttct aggcctctct	6180
gctgatggag gtaggatata cacgtacagt ctccctctt cccagattcc gtacttgagc	6240
tcgcctactt gctaacattt atttatatcc cccaaattaa acctcacagc acttctgcaa	6300
tcactcactg acttgcagag tgtgaaaaaa ctgagtcacc atcacacgtt ccaaactgag	6360
gtcaactgag gccacaacgc cccatcttct tgctccggct gtcgagatgt aagcaagtgt	6420
ccttctctcg gtctagctag tgccatgctt tccacatcac tgtgcttttt gtgggcaatt	6480
ttgctgtata aaatgtcccc tgcacatatg ctgctgtgta gtgctcctag gtgcatgagg	6540
ctgccccacg ccttacagag agaatatgca tgagaggctt tattcaggta tgagttatag	6600
cgtagttggc catgaattca atgttaatga atcaacaata tacagtaaata aaggtgcttt	6660
ttagagacag ggtctcactc tgtcacccag gctttagagt ccagtgggtg gaccttggct	6720
cactgccgcc tcaacctcct gggctcaagt gatcctcca cctcagcctc ccaaactgtt	6780

gggattacag gcgtgagcta ctgcactcag cctaaataag gtgtcttaga aacacacata	6840
agacaagggtt atgggctgag tgcggtggct catgcctgta atcccaacac tttgggaggc	6900
caagggtggga gggtcacttg aggccagaag tttgagacta gcctgggcaa catggcaaga	6960
cctcatctgt atatTTTTTTT aaatcagaca ggtgtggtgg tgcatgccta tagtcccagc	7020
tactggagag gctgaggcag gaaaatggcc tgagcccagg aggtcaaggc tgcagtgacc	7080
catgattgta cactgcatt ccagcctggg gtgacacagc aagacgctgt cttaaaaaaa	7140
aaaaaaaaaa aagccaggtc aggtatcgaa cagttggcaa aaacgttgtg acctgaggct	7200
cacaggaacc tagcccgatg tttccctag gagcaatggg tcagtattca ataattcagg	7260
gttcccagtg actttatgga gcataacttt caagaataac aagaaccaac tgtacgtgtg	7320
tatgtatact cacactttta ttttatttta ttttattttt tgagacagag tctcactctg	7380
tcaccaggc tggagtaaaa tggcgtgac tcgactcact gcaacctccg cctcccagg	7440
tcaagtgatt ctcagcctcc caagtagctg ggattacagg tgtgccccca caaccggcta	7500
atttctgtat ttttagtaga gacggagttt cgccacattg gccacgctgg tctcaaactc	7560
ctaacctcaa gtgatccacc caectcagcc tcccaaagtg ctggaattac aggcattgagc	7620
tgccgtgcct agcctacata cacttttata cacacatgca tctatgacta tttctctatt	7680
tctgtgcatg tgtgcgtggc agtacctaca gtttcagcta tgtgtctggg tactgtctcg	7740
tccaagtttg taagcacctt ctccaaagtg caaagcctgg cttgtgttac tatccatag	7800
tttacttatt tgctcaatca atttacttat tagctccata accagcttcc catctgctcc	7860
agtagcctct gctgtcagtc acctctgcac cctacccac cttgcttccg gatgctggat	7920
gccaatcacc cccgacacct ctacatagca ccacctcga catgctgctt ctttatttct	7980
tatttatttg tttgagatgg agtcttactc tgttgcccag gctggagtgc agtggcacga	8040
tccaggctca ctgcaacgtc cgctcctgg gttcaagtga ttctcctgcc tcagcttctc	8100
aatagctgg gattacaggt gccaccacc acgcccagct aatttttgta ttttagtag	8160
agatgggggtt tcaccatgtt ggccaggctg gtctcgaaact cctgacctca agtgatccac	8220
cttggcctct caaagtgtg ggattacagg tgtgagccac cgcgcctggg ctgcttcttt	8280
aatgccagg caccaacatt tgtgcaatgg ggtgggagga aagaacaggg aggagagcac	8340
actgccggcc cctgcactga atccactgat caatctgggg gcaactgcca tctccatctc	8400
ctgtcttctt atccgtgaac atctactgca gtctctcca atgtccttct gtaaagttgt	8460
attatgtttt gcatacaggc cttgcatatt agttctcaga tataatccat atactttata	8520

taaaattcaa accacattta aaaaaataaa actagcatga ctataacgga gtctgcaaca	8580
ttctcacaga ctttatgata aaacatgaaa cttcaaagat acttaggggtg gggcagggac	8640
aatgtttaag gctgcctgga agcctcccca tccctgagcc agaaagtcct atctcccctt	8700
caaggggaaa tgcttgaaaa agcactgac aggctaaaat gacagggac agggagtaat	8760
caaagtacaa gtgagctggt ctctccatt ctgagcacag caaagttcag tctctccaag	8820
tccaagaatc atacacctgt ttgccaagaa tgaagttcag gtgtctacaa gtggctgaaa	8880
atattcattg ctgggccatt aacaacattc ttggcaaaac cataccttag cttctcgtgg	8940
aaattttctta aggtagaaga aacaggaaac acccaggctc gcttttatgt agacagttcc	9000
atgaagccag ggaccttccc cacatccacg tttaattac ctgcacgcag ctcacagtgt	9060
attcaacatc tacgcgtctc tctactggg gtggcggtgg ccactcaaac cctcatgcag	9120
ctacgatgac cgcaattttg gcaacataat ttcattgttt tcttgggct tttaccaag	9180
tcagtgcac aattctgcag ttgtctaaag attcaaatg agggacttga catttacaac	9240
aataataaaa tcttgggttt cctttaacca agcacatgtt ctgcctttta gagaaagctc	9300
tgcaaaactca agctggagtg ggatacttgc tgacatcttc aagcacccca ggaatagctc	9360
tactcccca tttccacctt ggctgaacca tctatatccc accaattccc ccaacatccc	9420
tccatccgtc catccatcca cccaaggacc tgctaagcca ggaggtctct cccatctacc	9480
ccacagcctg gcctcagccc acaagggtc tctctacatg aatcccaccg caccagagta	9540
gaccaagtct cccgtagact ccacctgac cacctccatg cctccagcca tttccacccc	9600
taaaaaccct ccttgggtct tacaccagc tgatgaatac ttggctgaat gtgacctggc	9660
ctcctggacc caggtgaagc ccacgtctc cgtaagcccg ccagctcacc ctgcctctgc	9720
accttcactg gagagagccc gcacttcacc tctcagggc aggcattggct gatgccccc	9780
agtggaatct ggtgcaaagc agggcccggg gcagagcagg gctgcctgca gagcaaggcc	9840
ctggtgctgg ggccgagcac ctccaatgct ggccgtggaa ccatccctcc cattccaggt	9900
gctgtctcca tcaagaatga gcgagctgct gacatttgca tgacaataat gaataaatac	9960
catattttgc ttcaaatcca gaatagatgt ggccaggggt ggcatatgac tgttgggaaa	10020
ggacagtttg cctcttccca aaccaacttg gattataaaa agcttttctt aacgaccaca	10080
agagcggagg agctcagggg cagacaaaag gaaggctggc tgcagaaggc gggagagtgg	10140
ggccttcagg ggcgggtggg gagagagaaa gcctggagct gcacccccaa ggtctgtgta	10200
catcaggtgc tacagaataa caccacctc tccagcttgg ccccccactg cctctccca	10260

gcccagtcac ccagacagca ccccaactccc cacacacacc tcacatctgc ccgcctcaca	10320
ctcaccagct tcggctctca atgcaacctg gaacctgccc ttggcctctc agctcagcca	10380
ccccattcc tgttggtccc tggcccccca tcgaattctc tctaattcta atgcacacac	10440
ttgcacactc aaacacacac acacacacac acacacacag cccagaggaa aaccataatt	10500
gactgaggtc caggcaagtt tcccagcag ggaccacatt tcaaaggta ggaagcagg	10560
cgaacaggaa acatacaggg ggcacgtttg ggggtggagc aggaaataag aaatcacttg	10620
caaaagataa aaagaaaatg aggtagctgg ttccagacac ctgggagcac acagaacagg	10680
acaggcgcct ccgggtcttc cctcaacagg gagatgggccc aggcaggctc ctgctgctcc	10740
accgcagagc tgggggctat ggccctgaca ccaaggccct ggggcaggcg gggaggcagc	10800
tgttctcctg cctgtgctcc cgggcagggc ctggccccac aagggaactg gccgaaggct	10860
ctgcttggtt actccggaaa gtccctgggag acaagcaaag gacttgctag gtcactccaa	10920
acggcccaga tgtgacaact gtgaagaagc cacaccaaaag caaggcgaca gaacaatgtt	10980
ggtgacgtca gggtatcagc ttacgctcaa ctccacttac ccgactcac ccgtaacctg	11040
ccgtctcttc ccaaccagta aaggatgcct aggtagaggg gcacaaggcc tggagcataa	11100
ttaccatttt aaaggctctg agaagtcctg cggtagaggaa gcctagtcca ctttctctcc	11160
cctaggattt cccaactgcg cctgatcaca gaacattttt tcatttccac tcaggaaaca	11220
tattttgaaa aacctggcc tagaggcaga agtgaaatgg aaaacacaaa agtaaaactg	11280
aacaggaggc actgggcaga gaacggtcag aggcgcctg aatcctggac cggtaggat	11340
ccccagcttg gcctgctccc ctccctgggc ccagaccgcc tccccccatt tcttgataa	11400
gaaggctaat gcgcatcagg gtgaagggtc tgcctgggct acacccccag gctcgcccca	11460
caccaatcgc gctcctgcga gagccagtga ctttcttgat ttggctactg tggaattgtt	11520
tgcaactaac cccccagat acagatacaa atgacaggat gatcagatgt aaaggaccca	11580
caggctctctg tgatacggct tcatgcagcc agcatggcta gtgcctgca gaatgagaat	11640
gaccccaggc aagtccttgc ctcccagacc cagaacccca tggagccac cagggtggt	11700
tcacaagcac tgtctgggtc gggcagagat tccagcaaga ggagggaaca tccatgcacc	11760
ggagccagtt accagaagca aatcgctctt tccaaaaccc aggtatttaa tggagtccac	11820
tgttgagtgg agctggggtc tagctatgga atactgcaca gcagagatct tctgagaga	11880
aagcagtttt cctgaaagc catgtgtcct ccaactaactg tgttttaatt gggcgaacgt	11940
ctgtatctca ttgcagtggc cgcgcatgtg ctgacaaggg gctggggggc gggtagggag	12000

cagaagctca	ggggcctggg	aggggaaggaa	acaggccacc	agggctcccc	agaaggcatg	12060
tatctctctc	acaaacacac	gcatgcacac	acacgtgcac	acatactctg	caagccctga	12120
gttagcaact	gtggaatgtg	accagctcag	tgatcccagg	acaagctgct	agggaatatg	12180
acatttgatt	gatgtctgca	aatgtgcgtt	ttcactaatt	agaaggttta	gggcagagca	12240
gagaaaaata	tgtatttcag	agtcccagtt	tgacctgcca	gaaaccagcc	cattactaac	12300
attcttattt	tcaacaaaat	atagcattct	gattacatac	catcttggtt	ccacgcctcc	12360
tgccctgcca	agcccccgga	agcgggccaa	ggccatggca	aatagtgaga	gaaacagttc	12420
caggggtggag	actgactcag	gggtgtcagt	cagtggggcg	ctgatggccg	gtgggaggcc	12480
agcagtcac	accctctcct	tgggacagtt	gagtagctct	ccccagggt	catgtggcca	12540
ctcaggttca	tatgggaggc	gagaggagt	gcagagtcca	ggagagtggc	tccgaagtca	12600
ctgttccctc	caggcctcag	tgtcttcac	cattaaatgg	gtaggctgag	gtctgggatg	12660
acaaggagg	cttgcaacta	ctgaaaccca	tgggaggctg	ttcgccgatt	tcttttattg	12720
atggaagaaa	acactcgtat	aattcaagta	ccaattaa	ggcaggcact	ggaaccaccg	12780
tctgccaat	cctagttttg	cctataccaa	atttgagcaa	gttaattgac	ctctcccagc	12840
ctcagtttct	tcgtctgtaa	aatgagggta	gggatggccc	ccagcccaca	gggcagctgg	12900
aaggattaaa	gaaatcaa	atctcttaga	gccacctgg	cacactgtga	tacacaacaa	12960
atgttagcta	tttttgtcta	tgaagtctag	attttatatc	ttgggtgttc	taaagcagga	13020
tacatttatt	taaaaacaag	gattttcatt	aaacacgtac	cccacagaca	gcaaccccat	13080
ggagactgct	cttaattcag	gccagtatcg	aaacgactct	aactacaagc	tttatacagg	13140
tctcttggct	gtccttcaaa	tccaactaag	gtggtacttc	tgaagcactg	tgacatgtg	13200
tgtgtgcatg	cacacgtgtg	ggaagggcgg	gtcacggat	ccctcaggta	ccccaccac	13260
gcagtctcaa	gtcacaaagc	gacagagcag	ccgaggaagg	tctgtgcccc	actggaccct	13320
cgtgaagcca	ccaactctac	ctctgcgccg	tgtcctgcag	actgggctac	cctttgggtg	13380
gggaccagca	tttgatgcaa	gaaaggcaga	cagaaaagga	aaagggcaag	ttcgactcca	13440
gataacacag	acagtaccaa	gccccagggt	ccataaatgc	cacgcagatg	gaagcattta	13500
ctgcgaggcc	acacagcaaa	cgcacggatc	cagggacgga	ggtgcagact	gcggtgcccc	13560
tgagccatga	ccctgcaa	taccaccatg	ggaaaggagg	ctgccaaaacc	ccccgacagt	13620
cggctgggct	ggcacagact	cgtgggttcc	atcgaggtgg	gaggaggtgg	gacgtcccag	13680
ccctccccc	atgccactg	cagaggaag	cggccgtttc	ccctgtgtgg	ttacaaaggt	13740

ctcattgttc ttcctcacag ggaggaaact ggaggaccga gctcagaacg catttttagaa	13800
ctggcagaaa agaacatctg gggaaggaaa cacatttcag aaacaaacat acctttgtac	13860
cagcttttat tttctttaag tgttgaaaaa ataataataa taaagacatg ccaaatttat	13920
catcgcteta caaaatccct ttattgagca aaacgtggca gctctacttt caaatgatta	13980
ctgttcttgg aaaattgcag caacgtggat gccaaagccc gaaggccgcc atcagcagcc	14040
aaacaaaaga tgccacctcg ggctccgcga cactgtacca tgccagggaa ctggacagat	14100
ttggggaaatg ccacggtttg cctttaaccc cttgcctcct ggtctcctga tgcattctcag	14160
aggctaacat tctttgagga actggcattt cttagtgtga aatatgcatg tgggtttggg	14220
agctgcctgc aaagtccagt gttgacgac agctttgatt tecttggaat caagtttacg	14280
tgtcagagtct ggaagttaag aagaatttg agaagctgag cactatggtg ttgcaggccc	14340
tgggtgaact cttccaccaa gcattcattg tggactgaca gcgtgcgagg ggctctgcag	14400
gcaggtgcac aggacgaaac acattccgtc cgggggaaac ctgcaggaaa gctccctctt	14460
cttcctaagg tgccgggcct agcttcatgg gtccctaccc tccacgcctg tcacactttc	14520
tgagtctcat gtgggagctg cttctggttc ctgacttcac tcagtcctca taggaggtgg	14580
aactactgtc accccatttt acagatgggg agactgggca caaggggacc aagaaaccaa	14640
tgcaaagtca cacttgtggg atcagtgaca ggggagatca attcccaggt tctttctgca	14700
agagttaa at tgttttcatg ctgcctaagg gggggcaact gaaagaccac tgcatacttt	14760
tgccaaaagg gtcaagcaca ggagccgcag ccagtgggtc agatccgcag aggcgctggg	14820
gtgacctcc ccatacctgg agggatgctt gtccctcctt ggccttactt gggccccctc	14880
atgaccgtgg cctcccagga cctcagcaca atcccggctc tgtgctccag gacaagccct	14940
ccgtcccaa gactgtgagg aaatggaacg aagaggggct cgctgcagcc cagcaccac	15000
actgccccct ctcaggggca agaaccgtcc tggaggactt ggctttggag ggggagcctg	15060
ggaggccagt aagtcaacaa gcctctactg ctcattgggtg ggatcccacc gcaggcccc	15120
acctgctggg gcgggcaggg acgggcggca cagcttggcc agggcagata acccccacct	15180
tggccagggc gaaggcagga cacgtgggtt ccagcctggc cccaccatcc ctgcacaaca	15240
ctgggcaaag tccacgtttt cctcaactgg gtgttgacat ctgcaggaca ggggcatgga	15300
ggtacagagc gctgaagcca cacagcaacc taggagcgag actccatgcc tccccgggga	15360
cccctcccca ccatgaggac catgaaggct tcccatgtgc cgcaaggact ctggtgtgga	15420
gacacacgtc tectacacag ccaggcctaa cgctcttgta actgggtggt cccacctggg	15480

ctcacagctg gagggccagg agctcaaggc ttcgcagggt ctgctctcat cccagaggcg	15540
atggggagcc acagcaggct gcaggagaga ggggtgggccc cctccacttc agaggcccca	15600
tctggcccac agactggaga gcacatctct cagcaaccac ggagcgccaa ctgcgcacag	15660
ggcctggctg tcagagcggg gcaaaggcac tgaccgtcac ggccaggggc agggaagacg	15720
gggtgggcagg gaccttgggc agagggggaa gaacctggtg cccaggctgg ccctgccttc	15780
agcagtgaag ctgagtgggg aggcgctgat gcagggggcc agaaagggt gctggtcagc	15840
cgggaggagc cccccacaga ggaagcagcc agcccagacg cagatggcag ggtccctca	15900
acaatgtcct ctgaaaagga gaggcgggga ctgctctggt gacacctaca aatagatagt	15960
cagccctcag cccctgcc aacttctgac aaagcagagg ccccagggg aggcgcaccc	16020
gaaggtacct gcacctgtcc cccagactcc tagagcccac ctgaccccat cccaccaggg	16080
ctccagctac aaaataaatg ccgaggccag ctaggcaagg acgcacactc ggtaccgact	16140
gaataggctc cacgttgtca tgagcgcaac ccacaggcca ccaggccaca ctatgcagag	16200
ctgagatggt ttcggccaag cagcctctca gctgagctga acaagtccag agtccccggg	16260
gggtcgtcac tatggagtaa caattgcgat gcgatggtaa ccctaacagc taaccgtcac	16320
tgagccaggc cctgagctag gtacttttca acgctgcctc tctgcagcct caggacgagc	16380
ctgtgggagc ataaagatca ttccctatca cggatgggga aactgagctc tgaagcagtt	16440
aacgtgcttg tcccagaccg cagagctagg agcaggacac aacagcaggt caggcaggaa	16500
cgggtgaggg gggcctgcat gggcttctct ggaggctgcg catacacgca acccccagga	16560
ccccgacctt gcacctgcag ctcgctactg cccctcagt gactccagca aacctcgggg	16620
taggggaagg aggtgggaa tacctcgggt gtccgaaaca gcagcttctg cttggaggcc	16680
actgctgcat aatggttgct gcccagcaca cccaagcca cctgtgccac ctgtggtgac	16740
cttccagcat gccttgggtga ccaagctggc cttaggtgct gtgggcagcc aagaatagaa	16800
cagggccac cctcctctt cactaataa caaagcaaga ggccggcact tcgactgagt	16860
gcatccctct agctcaagg cctcacggat cacaggggtc agggcaagat cccaattctg	16920
cattcccgtc tgcctttcat cctgctctgc caacaacagc cagtgaggct ggggacatcc	16980
ctgaacctgt ttctcacctg aaacacatca taccattgga cccagccct ccgggagagg	17040
ccctaatecc tgactgtggt gagatcagat cactgggttaa gtaccagaa gggccttgggt	17100
caggggctcc aggggtgggg ggtgatgggc gtggtggtat cccgctctgg gctatagtcc	17160
acctgatgg aggaggtctg tggtcagaac cgggctgtgc agggcacagg agcccagagg	17220

gacccccaga gctcacctgg tgggtctctga gcaggggtcc ctcaaccctc agagaaaagc	17280
acagcaagga ggccgcccag agcccagcgc ctagcaccca gtggcgtgcc agacctgcct	17340
ggatcctgga gatctctcat caccctccaa gtcagtcatg cccaaccag ggacccacag	17400
cccacggggc cgtgaagggtg tgctgagtc aagaaggcct tcgacactgg gaagccaagt	17460
ggcacctcct ggtgtggagc aggcggaatc ccaccagcct ctgctctgcc agtgggcaca	17520
gctggacgat gagcagaagg ggctgttgct taataaacgt catttcctta agaggataaa	17580
acctttcaaa acagatggaa attttttttt aattaaaact ggtggccaaa gagatggaaa	17640
gcaccccttg tgccctccctc ccacgtgac ccacctctg cacacctcaa gctgttcgct	17700
gccaggtgt ctctgaggc actgggggcg ggtgagaatc cgtgagccct cggccagccg	17760
tggtctctctg gagctctgcc ccaggccatc agggcacacg ccgggcaccc tggggggccac	17820
acagggcaga gccagctgg gtcagcacac agggccacac tgggcacaca agtctctgag	17880
cctccctgt ggacgcagct ctactatcc caccctacta ggtcccgggg atctgtccca	17940
cagggtgata tgctgtcaca gaccactacc agagccatgg cctgctgttc cggccgcagc	18000
caggtagtca cttgctccac agggacaggc aacgccgcac ttgggggctg ctctgcggca	18060
ggactagagc tccagcagct cagccctcct gagaaggaga actccatgct ctaagaggca	18120
gacgcagcgg acggcaccaa agccaccaca agcccacggg gccctgcatg gcaggtcagg	18180
agtccttgac cactcgtctt ttgtaaccag agctgcagtg gagtctacga ggcaaggact	18240
gtgggcggca gtggccacag caaatgaatg agtgtcccaa gggagcaggc ggctgcgggg	18300
aggcacagcc gggacccagg agtcctccgg cactgcagca aactccctgg gcccctgag	18360
cagcgaccag gtggcaagtg catgaactcc cgggggcata acctgggagg gtgacactct	18420
cttcgtgttc aaattcttga gaacgcatta aaaatatcac tcagtcacct actctatagt	18480
tttaactcaa aagtaccaa gtagccaggc gcggtggctc acgcctataa tcccagtact	18540
ttgggaagct gaggcaagag gatcacttaa gcccaggagt tccaaatgaa cctgggcaac	18600
atggagggac ccatttcta caaaaaaagt gttttaaaaa attacctggg cctggtggtg	18660
tgtgcctgta gtcccagcta ctcaggaggc tgaggcgggga gaaccacatg aaccagggg	18720
aggtagaggc tgcagtaggc tgtgatggca ccactgcact ccagcctggg taacagagtc	18780
agaactctatc tcaaaataaa tttaaaaagc accaagccag gcttggtggc tcacacctgt	18840
aatcccagca ctcaggagg ctgaggcaag tggatcacct gagtcagaag ttcgagacca	18900
gccagccaa catggtgaaa ctccatctcc actaaaaata caaaaattac ccaggcgtgg	18960

tggcgggtgc ctgtaatccc agctactcag gaagctgagg caggagaact gcttgaaccc	19020
aggaggcaga ggttgcagtg agccaagact gtgctactgc actcaagcct gggagacaga	19080
acgagactcc atctcaaaaa ataaataaat caatcaaaac caccaagact ttttaataata	19140
aacattttatt attccataat tccttttttg catgattaaa aatggtttata taaagtttcc	19200
tgaaaaatggg aagaatgccca agtgaaggct gcaaattgccc aagccccac cgtggcatct	19260
cacggagtct gggccctagg aggctggtgg gtaccacgtg gacccgagac ttcacagtca	19320
agtccttttg gggtagactg ggtttccac accccagaaa tatgggctct tactgcagga	19380
ccatgggggt cctcacactt ggcccagaag ctgtcacata gccagacagg tgttctacaa	19440
cctaggctag agggagctca tgctccagca gaattcgagc cagaggaggt aaaagatggg	19500
taagatctgc tccctggaca gatgaggcct tggcctcaga acagttactg atcatctacc	19560
agacatcaca ctagaggcag aggggcgcag acgaagacag cccctgtcct caaggccctc	19620
ccaggttggg tggaccatgg aaggttccag acagatctgg caagagaagt gccacacca	19680
ggggcagaag atgggcaggt ctgctcaggg cggcacggcc tgccaggcca aaaagtcca	19740
acttcagatg ctggagaatg ggcacgactg tctgagaaag ggaaggatgt gatgaaaact	19800
acttgagaa aaattaatct ggccagagca taagataaat gggcaaaggg gaggttccag	19860
aaagcaagga gaccaagtaa aagctgatgt cattggctct gaatctaggc tttcactgaa	19920
tatgcaccgc agggcctgta ggtaaagcct cagagcccag ggagtctgag tggaggagag	19980
ggcaggggac agagctgggg cctgtgtcta cagtgtcag gaggaatagg catggacgtc	20040
agctcggagg ctccagctga agtgaggagg cggccagggc agcacggcca cggccggtc	20100
cagactcctt ttgggaagca agttcgctct gggggaaagt ttggagaaat ggcctttacc	20160
cgcagaagca agccccagaa catatcttgc tccaaaacta tctcgtagag tgaggacgtt	20220
aagcttcagg tcccctagag gagacagtct gtccttctt ggggcagaa ccaagggtggc	20280
cagagcctgg aaggcaccca gcaccaggc tgggtgtgtc cagcccaggc cacacgtca	20340
gatagctatt aatgccccgt tgagcaattt cctgagagct ttgccaggca ggtaccgcct	20400
ccccatctga actaatacag gggtagatcc caaggaagaa atgaaagggtg cccacatttt	20460
gctctgggat taactagga ggggagtgat aattaactca gtaattatat ttgccatcgg	20520
gctaattgcta aaattagtgt gcattagaat ttctttcctg agcagacacc ggagtgaatt	20580
gggcagcagg agtggctcgg gcaagtcggc acaaagggca cctccagagc cttccacaaa	20640
tgtagcaaaa acccacaat gtcaaggccg gctccactgc acccagcaga tgaattcact	20700

tccacagcct	gagaccgcca	gctcatcgga	ggccatttaa	aatccagccc	tctgacacct	20760
gctggatata	accattttacc	gtccccagat	caagagatca	aaggggtggaa	cctgatagga	20820
cggtcttgaa	gttcaccaca	aaagcataaa	cgtgcaagca	gagccaatac	gtcttttgaa	20880
aaggacaatg	aggtgggaat	ttacataact	gatcttaaaa	tatgtttctga	tgcttcagag	20940
atggagacag	cagcattccg	gtacacaaa	acactcacag	gcagtggagc	acagtgaagg	21000
gtctggaatc	aggacccagg	tgtctgtgga	cactacacat	aaaagagcag	catttacaat	21060
gaatggatag	gatggaccat	cccaccaagg	tgttggaaca	ctccctattc	actggccaga	21120
cccctacctc	ataccatata	caaaaaaaaa	aaaaaaaaaa	aaaccagac	agaataatgt	21180
ctgaatgtaa	aacataaaac	agtaacagtc	ctggaagaaa	ataatggagg	atatatttat	21240
aatctggaga	tggagtaaca	agggatagga	aaaaagccat	agggaaaaag	tagagttatg	21300
attatatgaa	gcttcttaat	atcttttatga	taatgtacca	ccagaaacaa	ggatgaagga	21360
ctagctacag	accagcagtg	aaacctgaaa	caaacagaac	aaagaattaa	agtccatacc	21420
aaataaagac	ctcccacaaa	tctataagaa	aaagataaac	aggctggcac	cgtggcttat	21480
gtctgtaatc	ccagcacttt	gggaggcgga	gatgggtagg	tcacttgagg	tcaggagttc	21540
gagaccagcc	tggccaacat	ggtgaaaccc	tgtctctacc	aaaaatacaa	aaattagcca	21600
ggcgtggtgg	cgcattgctg	tagtcccagc	tacttgggag	gctgagccag	gagaacagct	21660
ggaaccgagg	aggcagaggt	tgcagtgaac	caagatggca	atcgcgccac	tgactccag	21720
cctggaggac	acagcgagac	tctgtctcaa	aaaaaaaaaa	aaaagaagaa	gaagaaaaaa	21780
gaaaagaaaa	agacaacaga	aaaatggggc	aaggataagt	gtaggcaatt	tgagaaaaag	21840
taaataccaa	taaaccagaa	atgaggggtg	tgcaaatcaa	aaggtgttat	aatttttaac	21900
caaactggac	caaagaaaac	acaaaaaac	aaaatcttgt	aattgccagc	atcagagagg	21960
atataggaaa	gtgtgtgttc	tcgtagatgc	ttgcaggtat	gaactgttac	agccttttag	22020
gagttatgta	tgtatgtatg	cttgtatgta	tgtatttgag	acagggtctc	gctctgttgc	22080
ccaggctaga	tctgttgacg	tgctgtgatc	atggcttact	gcagccttga	cctcctgagc	22140
tcaatagatt	ttcccacctc	agcctttcaa	gtagctgaga	ctacaggagt	gtgcaatcat	22200
actcagctaa	ttttttaaat	ttttttaga	catggggggg	ctcccaattt	tgcccaggct	22260
ggtctcgaac	tcttggaact	aagtgatcct	cctgcctcaa	cctcccaaag	tgctgggatt	22320
acctggatga	gccactgtgc	ccggcctcaa	tatcttttaa	aacagaaatg	gacacactct	22380
ttgactagga	atgtatccta	taaaaacact	tatacacatg	cagagacaca	cgagcaagca	22440

tgctttgtaa tagcaatgaa ggctggaaaa actcctcaat caggtaaagt ctgtcaagt	22500
cacctgtgta ctatgaaatg gcacttggct tttacaaga gcaaagacag aaaagcaaaa	22560
gtacaaagta ggggtgtgatg gcacatgcct gcagtcccag ctactcagga ggctgaggca	22620
ggaagatcct ttgagcccag gagttggagg ccaggagctg ggcaatagtg agaaaaata	22680
aaattaaata ataataataa taaaataggc tgggcacagc ggctcatgcc tgtaatcca	22740
acactttggg aggctgaggt gggaggatcg cttgatcca ggagttcaag gccagcctgg	22800
gcagcaaagc aagacacca tctcaacgac aaattttaaa aaatcagcca ggcaggctgg	22860
gcatggtggc tcacgcctgt aatcccagca ctttgggagg ccgaggcagg cagatcactt	22920
gaggtcagga gttcagagacc agcctggcca acgtggcaaa accctgtctc tactaaaaat	22980
acaaaaatta gctgggcatg gtggcagatg cctgtagtcc cagctactga ggcacaagaa	23040
tcgcttgaac caggggtggca gaagttacag tgagccgaga tcgtgccacc gcactccatc	23100
ctgggcgtga gtgagactcc tgtctcaaaa aaaaaaaaaa aaaaaaaca aggagccagg	23160
cacggtgggg tgagggaggg cacagaagca gcgcctcttc tgggggcacc cccaatctct	23220
agcgatccag aggcctcagg atcctgaagg gagaaaaaac gtgaagctcc gtgctagaag	23280
agaccataga gattggaatc agctggttct attttcaaaa aaaaggaaac tgaggccctc	23340
agaaggtgag tgcctctcaa tgccccacag ggaggcaggg agagggtctc gagccctgca	23400
gggcccctga ttcttgcaat ggggtggagt ggagcctgtg ccgccccac caggcacctt	23460
ctcaggagag gagccgttgt catatccttg aaggggtcct tgagccctc aaaaggctaa	23520
aaaccacttt cctccttgag tgaaccttca cctcagttta accacaagaa aaactacatt	23580
aaggcccagc gcagtggctc atgtctgtaa tcccagcact ttgggaggct gaggtgggtg	23640
gatcgcttga gcccaggagt tcaagaccag cctgggcaac atagtgaaac cctgtctcta	23700
caaaaaacaa caaaatcagc tgggcgtggt ggtgcacacc tgaggcca actacttgcg	23760
ggctgagggtg agaggattgc ttcagcccag gaggtagagg ctgcagtaag cggtgactga	23820
atcactgcac tccagcctca gcaacagagc aagactcaaa aaaaaaaaaa aaagcaggcc	23880
gggtgtggtg gctcacgcct gtaatcccag caccttggga ggccgagcgg gaggatcagg	23940
agatggagac catcctggct aacacggtga aaccccgctc ctactaaaaa tgcaaaaaat	24000
tagccgggcg tgggtggcgg tgctgtagt tccagctact caggaggctg aggcaggaga	24060
aaggcgtgac cctgggagggt ggagcttgca gtgagctgag atcacaccgc tgcaactccag	24120
cctgggcgac agagcaagac tccatctcaa aaaaaaaaaa attaaatctc aaaaaaatt	24180

acattaaggc aaactaaaag atgttttaaaa tatatatatt aaattaaata cactccaata	24240
gagcaaatac gaaaataccc agaaaacaca atccccgcac cccaggaca acctcccagg	24300
gggtccacag caagagaccc caagcacgag agacagagaa cagtgtccct gtggcggaac	24360
ctctggccca tcaggctcta ttagaaaata aggctcttgc cactgagaga aagaggcaca	24420
gtcgcccagc agccacgggc tctggcacac cagcagtcag gccagcaaag tgtcaactgc	24480
cccctacaag gtgacaaact aggacaaact ggaaaccaga ggctggacct ggagcacagg	24540
gaccaccaca tggggctggg gaatgggcag ggacctcaga gcgccacca catgcctaag	24600
agcagcgcgt atgcgcatgc ctctgcatgg cttagggaca caggagctc cccccaccc	24660
caaccagga aggcagcccc cactaccag gtagggaacg gataggacca gcacccggtt	24720
ctgctcgtaa ctgaggctc caggccccct cgggggcaac cagcacagag ctgagacccc	24780
aaatatcttc acccacctc tggccccat ctggacaagg gtgctgggga ctggctctca	24840
gtcacacct cggggctact ttcaaaggac agctggatgc cccagggcag gagcttttgg	24900
ccccagctc cctacccca gacaccagct cttgggaccc caccagcatg ggcaagggtg	24960
acaccatcgt ccgattttg cagatgagga aactgaggct gagggtggc acacggctct	25020
ccagagctga agagaatgca gagagcagcc ggagccagcc ggtgggtccc tgaggccggc	25080
tcgtagcaag ccacagctgc ctccgccat cacacttga cctcactggc cccaggacag	25140
ccctccagg cggcctggca cagagccac accctgctgc ttctgaaca aataagtga	25200
caaggccacc aagccgagga cctggatgta gccccggctc ccgccagggc ctcccaaca	25260
gactccccat ttggagagcg cattaagtgt ttccaaagcc tcacaaacca cagatgtccg	25320
gctgtctcac ggcttctgta acctgaactt ggccctcact ctgccctccc agcactctc	25380
tcagggcca ggccctcct ctgagatgcc agcactgact cccaacttg tccccatcac	25440
ctggctcgtt cctgaacctc ggcaggagag tctcaggcca gatcctcca ccagccacct	25500
ccaccaggat gcaggaggca tgagacctgc tcgtgccggc tgggagatgc aaccaacaa	25560
gatcaatcca atcagcggat gaactgaaa atataatgtg gtccctccac acaatggaat	25620
attattcagc cacaaaaagg gctgaaatag gccgggcgtg atggctcaca cctgtaatcc	25680
cagcactttg ggaggccgag gccggcagct cacttgaggt caggagttca agaccagcct	25740
ggccaacatg gtgaaatccc gtctctacta aaaatacaaa aattagctgg gcgtgggtggc	25800
gggcacctgt aatgcaagct acttgggagc ctgaggcagg agaatactt aaaccagga	25860
ggcagaagtt gcagtgagcc aagatcgac caccgcactc caacctgggc aacagagcaa	25920

gactccat	ttt caaaaaaaaa	ataaaaggct	gaaacaccca	tacgtggtac	tacttggatg	25980
actcctgaaa	acgttacagt	aaccaaggaa	gtcagccacg	aagacgcatt	gtaagattcc	26040
cttcatgcaa	aatgcccaga	acaggcagaa	ccacagaggc	agaaagtcga	ctggtgttca	26100
ccaggggatc	cggggagagg	gaacgggaag	tcaccgtgta	atgggtatgg	gttttatttt	26160
gggggtgatg	aaatctctta	taacttgata	gaagagagg	ttgtaaacac	tgtgaatgta	26220
ccaaatgcct	gccttctata	ctttaatatt	ttatattata	taagtttcac	ctcaatttaa	26280
aaaaaaaaa	actcgacacc	tttcacctag	gaaagatctg	gcttttagctt	gcatttcctg	26340
taactcctgc	ctaaagcctt	ccagaagcctt	ccgctgcctt	gtggatcaca	accagactcc	26400
acaccatgat	ctggcctcta	agggcctctc	gcaggacacc	ccgaggggtga	aggagcaccc	26460
gtggggccac	ctctgcatag	ctgcaaagct	tctttccctg	tcttcccctc	tacatgggaa	26520
gctctgcccc	gaggggagg	gccttatctg	ccattctatc	gcactcaacc	ctagcacttc	26580
actcggtagc	agacaccaa	gcaaacacgc	aacagcatta	taccgggcca	ggtgcacgtt	26640
aactcactga	attcatggta	ggaaggattc	tattcccatt	ttacaggtga	gaaaactgag	26700
gcacacaaa	gtagcatcag	cttcctaagc	ctcccagcac	aggaagcggc	caggctggaa	26760
tcagaccctg	ggcgagggg	ctctgtccac	agtgctaact	aactactcct	gccccgagg	26820
gctgcagcgg	tgagtgagt	agtttgtcag	tggactggat	gtccaaggtc	atacaggaaa	26880
aatccagact	attgtaataa	cagcctctag	accggctggg	gccagaaaga	tcgaggacgc	26940
tgacacacaa	ctgcgctcac	tgcagctctg	ccagggatgg	ggctaaaggt	ctcacacagg	27000
gcagttaggg	ctccccatag	cctgggagag	gaacgggggtg	agataacaga	aactaggtat	27060
ggtgcccga	gtcaaacacg	cactgagcat	gtaaaccag	gtgggtctga	ccccaaacc	27120
ctccaccccc	atcagccctg	caaccgctg	ctgcaaggga	gaaagcaact	cagaggcctc	27180
acctgcctac	atccccacc	cgtgtgtgtg	agttctacta	aatgcctgag	cagtgcacac	27240
gcacggctga	aattaaacgg	gttccaaaa	cgacaggaag	cacgaagtga	atctcccag	27300
gaaagtgctg	aacaaatgct	ggatcgggtt	caccggcgaa	tttcttgga	ctgaagagg	27360
gagctaaaca	cacggggccc	tgctttggag	gggactctct	cagggtgctc	cacacagcac	27420
ttggttaacc	ccactcagcc	cttctgggct	ctcccagagg	gcccggcctt	ggccttgggc	27480
atctacagga	ggaacctcca	gggggagagg	gggtgcctgg	acaggccggc	cctggaacaa	27540
gcacttgggc	cccaggagga	gaggactagg	gcttgggagc	tggggaagtt	ctcagactg	27600
ggaccactag	aacaaagcca	tttccgtg	ttcacagctt	ccaattgcaa	caggaagcaa	27660

tcaggaaaaa taattagcgg ccacttact ggcttcgctg aggtccgagg catgtatttc	27720
acacagtaaa accagggata taacatcaaa accgttctgc agaaagattc ctccctttcc	27780
ttccatttta ggcttgatc accacattca ctggggctcc caggccttgc tgcctaagt	27840
taaaataatc aactctatct ttgcctcaca cacaactgaa ctctacagct ataattcttt	27900
ctcctcaggg gctcgaacca catggacgac aggcatttga ctccagcaac atcaccccaa	27960
aacgtgcaca aaacccaaaa ctgcaatgag gtgaaaggca acgcggtcgg cctagaaacc	28020
ccccctttaa aacaaacagt tccccaaaaa ccccttttgc ctcttgacc caggcatttc	28080
cggaaaaagg agcggcgctg gcctgtactc ccagatact gtcgctgttt tgtcttcacc	28140
ttgttttgct agctccagac aaggccccac aatgtaaaca cgctcctgaa agaggcagat	28200
ttggggtgaa actgtccata gaatctctag gcttgggtca gaggcaggag gacgtgaaac	28260
aaactccaag ctctcctgt tccccgctgt ccccccacacc tccaagcaga ggctgcagcc	28320
tgggggatct gactacaggg ccaccccgct gcaccattca cactggaaat attcaggag	28380
acagctgttt gccttaagga ggcccagaca aaggggcccg aggtcctccc cgctaaactg	28440
ccacaaacag aacaggagcc gcggcggtgca caggcacttg cggccgtgcc acttggccag	28500
ccatactcca gaaaaacaaa acacgcacat ccgaagagaa tgatttaggt agcaagaggc	28560
ttgcttgaaa aaccacatgg caatctccaa attaaaagaa catgtgtagc gtttcacgac	28620
tgcttaagtt tctgagtc tctgacctc aactccacc cctgggaaac accaaaagtt	28680
ggatgagaaa gttccccgc cctacctctc ccacgggag tgtacaactg aggcacaagc	28740
ctgcctcccc cactgccccg cgatctggga ccacgtctcc tccgcgtagc cgacccggg	28800
atggacacta tctggggacc cggcgggcac acggggcatt cgggtcgccc gggcacctgg	28860
caggtgtcag tccgcttga aaccacagc cacgcggctc acaggagcag cgccaccggc	28920
taggcgccc cgcgcccggg ctcagaactt tctcgtgcc acttcagccc gtcctcggag	28980
cacgcggggc ggccgcgcgg ccgctggaaa caggcttgcg aaccggctcc ccgggccagg	29040
cccgcctccg cgccccaggt ccccgctcgg tgcccgccc gggccacacg ggcccagcgc	29100
gggctcggct cggctcccgg cttccgcgg gctcgggcag gtgaggaccc gcccgcgccg	29160
cacctggcgg agcgggcgcc ctctcgcca gcccgggacg cagcgtcccc ggggagggcc	29220
cgggtgggga gacaaagggc ccgcgcgtgg cggggacgcc ggggacggca ggggatccc	29280
gggcgcgcgc cccaactcgc tccaactcg ccaagtcgct tccgagacgg cggcggcgcc	29340
cgcgcacttg gccgcggggc cgcccgggcc attgtccgag caaccgcgg cccgtcttac	29400

acgccgggcg cggaaggta tcgaatcagg

29430

<210> 8

<211> 33769

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (33739), (33749), (33758)

<223> Identity of nucleotide sequences at the above locations are unknown.

<400> 8

cttccccctta cactggctct tcgacccgcc tcggatgaaa actgaatggg tttagcctta	60
gaggctctcg gtctctaagg gaggtgggtc aggatgccgg ggacagggtc ctcttctctg	120
ggcaacgtgg gggaacgagc cacctacccc tccactgaat tgccctgggg tgtgggtacc	180
gacggctcat tcggtgtcca gggctctgaga tgtgttgaca ggaagaatga aaggggatgg	240
gagggatggg gcgaaagaag ccacctgcag cccaggaac tatctggcca gcacaccgtc	300
acccagcggc ctgagccacc cctgccagag ccaggaggag accctgcaa tgggtcacca	360
gtgtgcagga actcagaagg tcatcacagt taatacctc catgccccaa tgtgggaaaa	420
caggtttttt cacaacaaac aagataattt ttgttatttt ggcaaaagga ggcagggcag	480
ccccggacac ctccatccca cctcatcacc cagccgcagg gccccggcca tccctgcaga	540
cagagtggat gtcacaacct cctgcaccg aaccaagtgc agtcccagg ccacaggcca	600
cccaggaaag gtccagtggc ccccgaggc tcccaccgca ggctccccc cacagccggc	660
accaaccag gatagctgtg ttctctggc ttcttttcac acgggtagca gaaagctgag	720
atccggggaa agctgagatc cagggaaagc tgagaatcgg cctctgctgc ccggacgccc	780
acccccagct ctgctcccag ctccagggcc tccttctcag gtgcccttac aggaggcaga	840
gggcttgagc cacctcctgg gcctggggca cgcaggatga acggggtcac ggtgcaggcc	900
actgtccact gcgcagatcc caaggccata aacagcctgg ccacagtggc ttcccagctg	960

gcaggcggcc agattatattt tgttgtttag caattgatta agtttctccg ctgccccag	1020
gggtaagtgg tggggcaaatt gccgcaaccg cagcatttga cccgggatcc tgtgccaaagt	1080
gaccataggg tcacaaagca caagggaagt ggctgggccc gatgctggct ctgctggaac	1140
ctgaggccgg ccaactgtcac ctgcacggtg cctgggacct tccagcaagc acagagaagc	1200
tatggccctc caggagcagc tggcaggcac cttggcctgc agtcaggggc tctgtctgct	1260
cagctctaaa acaggaaagt cgctgctctg cctgggggtca gggcagccag agagtgacca	1320
agtcagtgcc ggccctcagga agggacctgc aggcgggtcc ctccctctcc catccctcgg	1380
tgccagccag cccctcctgt ggccccccac tgccctgcctc tgcccccattg cccaccaca	1440
acctcaggcc catggctgca tggccactcc ccaggcaggc agtggggatg ggatttcacc	1500
atgttgGCCa ggctgggtctc gaactcctga cctcagggtga ggagttccta aagtgtctgg	1560
attacaggcg tgagccaccg cgcagccct cctgttggtta ctaaactc acacccctt	1620
gctggggacc ctggtgaggg aacacagcct cacaagtga gtgtgggttt gttgagcaaa	1680
tgacgcctgg gcagccctct catctttgcc taaaactgaa gaatttaggg gcgtggatgt	1740
ataaaacagt tgggtgactta aatgaaaaag aaggccacac tcccccttt aggcaggcgg	1800
cctaattctt taaaagccag cacagggtgc ctttctgaac ccaggcacac agtaggtgtt	1860
caatggacag cagcggttac ttgtactgct catgacacc tgtctgtggc ctctgcagct	1920
ggctccagcc tgacgcatgg ctgcgcccct ccgcaaggcc accccggtat acatggaaac	1980
tctgtggaga aggccttggg ggccggccag gacgccaggc ccagatcca tctgcgccct	2040
tcctccatag acctcagcga gctctcggca ccatgtgcct caggccatt taagaagtag	2100
ggccggccag gcatggtggc tcatgcctgt aatcccagca ctttgggagg cccaagggtg	2160
gtggatcacg agatggtcag gagatcgaga ccacctggc taacacggtg aaaccccatc	2220
tctactaaaa atacaaaaa taagccgagt gtggtggcgg gtgcctatag tccaagctac	2280
tcgggaggct gaggcaggat aatcgcttga gctcagcagg cagaggttgc agttagcgga	2340
gatcgGCCa ttgcactcca gcctagggtga cagagagaga ctctgtctca attaaaaaa	2400
aaaaaaataa aaaaaagaag caggGCCagc cacggacgac ccctcacaca gctcccagga	2460
cgcgtgcctg ggtatagggc tcaggacct gaccgctgca gtggccccca agaaacgtta	2520
cttttgcac ccacccgcc tcagtggcag tagccaaaat aacggattag aatggaacca	2580
tgtgacaatg ccaactgccc aactgacaga agatggctat cagcagttca cgcggccca	2640
cctatcacia gtgcagggca ctctacaact tatgcatcct tcccagaca ccgtcctttc	2700

gaccctccca	ggtcagcaag	gcacacaggg	cctacatttc	acagccacac	agcagagggc	2760
tgaggctgga	actcggatgc	tctgatttcc	gttcaatcac	atccccagag	gtggcacaga	2820
gacggggggc	ttctcttgac	aaagtcaaga	aagtcaactgc	cagctccact	gaagacaaaa	2880
gaacctcagc	tctcaaacc	tcttgaaggt	gttaccgaac	tctcccagcc	tgtttcctgg	2940
gtcccgatgt	tgggtcccg	ggacacagga	agaggaagaa	gctccctaga	gcagagcctg	3000
gtgcacctgc	cacactctca	gagggctgcg	cacgggcgga	ggagccgtgt	gcaggagtgg	3060
ggctctggatg	gaggggcgct	gtggccgggg	gcagggggca	ggggaagggt	gctccaggtg	3120
gtgggcacag	cacgagcagg	ggcagggagg	tccacactca	gatgtgcaca	gggagaaaca	3180
aatcgtgcat	ttccattgga	ataggcggt	aaaggtagaa	aaacagagt	ggggccagga	3240
agggagtcgg	agccttctag	tgtctctctg	caggtgagcg	gcagcccag	gtgtcagctc	3300
agcagacttg	gggtccaggg	gccgtgtctt	ctatcactga	cccagggca	cacggaactg	3360
gggagggaga	gcagaggcac	agggcacggt	cagtgaacg	aaacaaggag	tcatcaccaa	3420
atgcggaaaag	ggcaaggagt	gcccgcagcc	gcacaagggt	tctgtctggg	caacgtgggc	3480
gtcccaccag	gccccgcacc	ctgcaagcgc	aaagctcgcc	actgaagata	aagggaagct	3540
gttgagagctg	cggagctggt	ctgggggtccg	catggagctg	ggcttatgct	gcagtcacaa	3600
gggggacatg	gaagaggctg	caggggacaa	aaccagtgc	cacagtctaa	ctctgagcct	3660
gtggaaaggc	gcccacagca	ttcacccatc	ccagagatgc	cattccccct	gtgccccgc	3720
tccacggtga	cagcgttctc	caggaatatg	atgcgccct	ctcctcttgc	atcagccctg	3780
acagtgahta	ttcaggccaa	aaagcagaag	agcacagctg	cgtggttcca	tttccatgta	3840
gttctggaac	aggcaacgct	aatccaaggt	gatagaagtc	aggagagtgg	tggagggggc	3900
gggggttgag	gatggcaaag	gggcaccggg	aactttccca	gtggtagaaa	tgttctctgt	3960
ctggaccgtg	tggtagttat	gcagacatat	gcagctgtca	aagttaatcc	aaatgtacac	4020
gttaaaatgt	gtgcgtttta	ttgcctgcaa	gttatacctc	aattaaaaaa	ataaagttag	4080
cactcaggct	tcttccacaa	cttctgaac	cgtgtgagct	gattttcttg	ctattaaaaa	4140
ttcacggtcc	atggctgaga	acagcagctg	ccttctgttt	gcaaagtcaa	cgccaatcac	4200
tgcccggccg	cggcagactc	ggccccacag	gacctcttt	cttttttccc	tttgacctac	4260
ttccctgata	agtgacaaga	cagccagact	ctgggaacaa	acgcccgtta	ttcgccccg	4320
agctgagcgg	gccctgcttc	ctgagctaata	ccgcccggac	agacggaggg	acgtgagggg	4380
ctttgccgtc	ggctccagct	gtcagtctgc	ccgtcagact	cgacagtggc	cccctctgtt	4440

cctcccgtg cccccactcc atccccgact tctttttgtt tctgtccct gacagacgaa	4500
catctgttaa aactctgtct ggggtgagctg tggccagcgg ccacaaaatc cccaagccgc	4560
acccagcct catctgggcg ctgccgggag cactgcctgg ccacctctg gacatagctc	4620
tgagagccac cggccagggc acgtgtggcc cgagtggcat ggtgcacgcc gctaagccca	4680
ctgccccaaag gcccccaagc aggagggatg tgcaggagac aaaagtcaaa agaacagggg	4740
cacgttccac agaggatggg gctggagggg tggcagtga gaaacagcagc ttccgaggat	4800
ggcgggtggca actcccaa at aaggcctcac tctgtctgtt tttagctcat tccacataat	4860
tggaaaaaca tggcagaaac cgaagccagc tgetgccttg gtccctggggc tgtgtggagg	4920
gggtgggggag gccggaggcc caggctctgc actcgactgc tggggatgag agtgactctg	4980
agctgcagag agcagcatcg cagccgccat ggtccattg agccccggcc acgctgggcg	5040
gcagaggctc gtgggatata cctgccctgt ctcatggggg tcacttcagg aggggcgggg	5100
gagccaggac acagcccagg gctagcggtc accctgcagc tcagggggcca cgtaaatagt	5160
gccaccttga aggcacacag cagtgcgggg cccccccgc caccaacgca tcctacctc	5220
taggaggccg cctgtgtgcc cctgggaacg ctgctccctg tccttgggg tcttggtgtg	5280
accacctct cagcccttc cttggggaag gcacctgact ccctacacc agctggcttt	5340
catttgctca aaatcaggaa aaagcagaat tcaagacatc acagaaatgt cttcgctgt	5400
aactccatga aagataaacg gtcagacacc caggaggag tcccaggac ccttgagtct	5460
cacctgaggc tctggcttca aacctcgaga tgtttccagc catgctagcg ccgccccca	5520
caacctgccc cacacagtcc tccttgggga actcacagat ttggcccca cctgccccgt	5580
ttcttctggt ggagtgggtg cgttgggttg ggggtgggct ggggactctg gatgtgtctt	5640
aagagtctga gtgattctga cacagccagg cctgcccc ctctgacct tcgccccaca	5700
ggaaaggag ccacacgcct gaagcgccca gcacacccc ctccgtctc ccagggtcac	5760
ccgctggcgg tgtgagccgt gctccccact gcccttcac ccaccccagc tcctcctggc	5820
agcaccagc cttggaagct acttctgatt acaaccgccg aaggaagact cgctccctcg	5880
gcactgacce agacagcctg caccatcacg ctgctcagca caaccacac agccttcctc	5940
caaaccccat ggagcgggga gtataatcac cccctttcta ccaacggaca aactgaagca	6000
cagagagggt aagtcacttt cctaagctcc caacacgatg aaaaaaata gaaggtcagc	6060
cgcgaagtgg aactaggtgc tccaagtccc cggctctgct gacactgcac ctctcgccg	6120
ccacgggtccc ggggtccgct gacactgcac ctctcgccg ccacgggtccc ggggtccgct	6180

gacactgcac ctctctgccg ccacgggtccc ggggtccgcct gacactgcac ctctctgccg	6240
ccacgggtccc ggggtccgcct gacactgcac ctctctgccg ccacgggtccc ggggtccgcct	6300
gacactgcac ctctctgccg ccacgggtccc ggggtccgcct gacactgcac ctctctgccg	6360
ccacgggtccc ggggtctgcct gacactgcac ctctctcaaca ccaccacggt cccgggtctg	6420
cctgacactg cactctctca ccaccaccac agtcccgggt ctgcctgaca ctgcatttcc	6480
tcatcaccac agtcccgggt ctgcctgaca ctgcatttcc tcatcaccac ggtcccgggt	6540
ctgcctgaca ctgcacttcc tcaccgccac ggtcccgggt ctgcctgaca ctgcacttcc	6600
tcaacaccac tccttggccg gctcccaact acaaaccaag ccatgtcttc catctgaat	6660
cctcttggcc taaacatcac tcacaatgcc tccctcggga acaggcacia gtcccaccag	6720
cacagcctcc ttcgttacct gcgtttccgc tagcccaggg ccagctccag agccctcacc	6780
acagagcctc tctcttcac ccccgacac tggacctcac caaccatag cctggaggag	6840
atccctgtgt gacccaggg cctcctctgc ccgactctga atttactgc ccaacgtgac	6900
acctcggaag gctctctggg cactggcagc cctccatggg caccgctcct tctggccagc	6960
tctgacatcc cggctgggtga ggtgccctgc acgaggcctc tgcccactgg gacctcacag	7020
ccgtgctgtc agctgcaaca agcgacagaa tttcacgtt tttcacgtt gcccctgggt	7080
gagcagctcc aggtagtttt cagtcgaggc gaggcgtccc gtcagcagcc aggcggcaca	7140
gctaattcat gcccgcggg cgcacggccg caataccaat gggcacctgc agcctggaaa	7200
gccacagagg aaccgagaa acgactgtg ctgaggtgac aggactgtgg tcttttaaca	7260
aaacattttc ctttaacgtg atattttacg gcaaggaatg aaacctggag ggcaggacat	7320
ttggatacta aagccccagg ctgccgcgtg gtctgctttg tgaagtctga agcccgcgcc	7380
ccattctggc cccgctcaca ggtccggctc tgactcacca gtttcaatgc taggcctgc	7440
ctgtcctcca accagaacat gacttcctta aggacaaagc cgtttctcgc ccatcccat	7500
ctccctctgg attaagaaat atgggaagat cttctagaac cactcaaatt ttgcagagag	7560
ccatcctggg gacaaacct tgaaatgctt ctaagaagag tttaggtttc ttctcaactc	7620
taaaacctct agaaaactct atttcacac cagctgcccc tggaacactt cagcttcaaa	7680
agggcccagg gcaggagac ggaggagcca gcatccacac cgagcaccag cctgttaatt	7740
aacgggaagc ggggtggggc catctccagg cagctctgag gtcagactgg ggaacctgc	7800
ttacaaaaaa aagtgaactg aaacgctcac gtctcatgc aaaaccagac tcccagttgc	7860
atctttctgt ctattgagg agctttttcc tcccttgac agaaccct acacacggca	7920

tctggaacca aagcagaaag attcaggctc agagtaaaac agtccccaca ctggctgcat	7980
gtggacgttc ccggcccaga gtctcgccca agcagggcct ataaatgaca caaaatgttt	8040
ttctcctgcg tgccagtcac gctccaactg agttatgtgt aaaagtgcct ctcacggctg	8100
agggcaaaaa cagttcccac aagactagag aaagggtgacc cctgacggct gagtctctag	8160
ggagcgtgga gctgctgtct cagccctgcg gccctgacgg ctctggaatg gaaaagctat	8220
ccaactggaa gggcagggct cgctgctagt ccagcggctc aaccacacag gtgtctgtgg	8280
tgtcagctcc atgccacaga gcccagggct ggggccagag ccaccaggcc ccctgccagc	8340
ctgcaggggc ctctcctct gggtagccta accacccctc gtgagcgcag gcagcctcct	8400
ctaatacca cagggcctgt cccccctct ccccgcttg caggaaaatg agccctgagg	8460
actccccagg gctgctctgg gcctggacat ggagactggg aattacattt gcagaaggag	8520
cgcaatgcc ttgaagggtc cagccacgag cagccagctc ccagggtca gaaggcccag	8580
ctgttagaac cctgggagcc agcaaagagc caggggctcc acctaagtct atagccctg	8640
cctcttctgg ttgggaaaga aatcaacgcc cctttactgg ctccactga cagccactc	8700
ccccaggtat gggaggattc tgggacgatg caggcaaacc tggaccctga gtgaacctgc	8760
cccagctctc acgggcctgg caccagccac agcacctaag gcgccgtca tggtgacaac	8820
atgaagtgga taagggtatg gacagtggac atggcagctg gacactgggc acccactgga	8880
tgccaggcac ccagcacggc tccgtcacc ctggatgagc agtggccctt tgcaagccag	8940
ggtagcctgg gcaagttatt tgggggtctc caagcttgct cagctgtgag acttactga	9000
gcatgagtc tgggatttta tcagggccca caccgcttc tggaaactctg atacgtgagg	9060
gagccacaca gggaccctta acaaaagctc ccagggaac atgttctctt gcctcagtct	9120
cccaaatagc tgggattaca ggcgcacgac taccgcccg ctaatttttg tatttttagt	9180
agagacaggg tttcaccatg ttggccaggc tggctctgaa ccctgacct caaatgatcc	9240
ttccactgtt agggcaaggc acctgacagg cagactgca cgatctgctt gttgggggt	9300
gtgtccattc cccactcctt cgacaaatgt ccacaccag ccttgctttg acacccaag	9360
aacagagatg gtgacacctg ctctctacat gccattgct ctccaaggc agacatcccc	9420
agcagatgca acacagtgt taggcagaca tcaccaatcg atggtggcaa cagacaccag	9480
gccctgctcc ctctaactcc agtggccagg cccaagcca gctctcacct gccactccc	9540
aaccacagc agcaagactc agaaatggca aaacacaaa gagaacagaa acgccccata	9600
gcgggaggat gactaaaaga catgtcttga taagatattg ttcaggcata ggccaggcac	9660

agtgggtcat gcctgtgatc ctagaacttt aggaggctga ggtaggtgga tcacctgagg 9720
 ttaggagttc aagaccagcc tagccaacat ggtgaaaccc catctctact aaacatacaa 9780
 aaattagcca gacatagtag cgggcgcctg taatcccagc tgcttgggag gctgaggcag 9840
 gagaattgct tgaacctggg aggtggaagc tgctgtgagc cactgtactc caacctggac 9900
 aacagagcaa gactctgtct caaaaaaaaa aaaaaaaaa gatataccttc actaaaactc 9960
 atgtctttga tacatattta cctcctgcaa tcgcaaagc ttctgcagtg cataaagtga 10020
 aataaatagc aggaagcctt acggttcgat caccacaca gacacacagt cacatacagg 10080
 aaaaacgcag ggagggtg ggaacaaaaa aacagaagat aaaatgtgga gacagacaca 10140
 ccaagagagt aagagaccac ctccagacct cccttcagct tctcaaacac acgagccggg 10200
 cccgttacag aatttgctgg gaccgctgca aaatggaagt gcagacagcc ccttactcaa 10260
 aaggtaggaa ttctcaggtc acaacagagc tcacctcata tgactacaca ggtcacacag 10320
 cccgtgaagt cgggtcccaac accagcatgc tctgcctca aagccgctgc acgtgctgtt 10380
 ccttctcgcc ttccctctt ttagtccttc agatctcagg cctcctgaga gagacctctg 10440
 acctgccggc tcaggcggcc acacccccag tacaggagtc tccggctcag ccctgctgt 10500
 gttccgtacc cgatccaggt ctgtcctatg tccatctgtg tgccggcttg ctctctgaca 10560
 tggcccccac cacacgtgtg cctcggggca ggggaacagg cccgtctcat taactgcttt 10620
 ctctctcagat attttctgga atatttgtgg atattgggca acatatatgc tccacctttt 10680
 tcagactagc caggacgagc tgcatttttt tttttttttt ttgagacag ggtctcactc 10740
 tgttgcccag gctggagtat agcggcatga tcttggtcga gtgcaacctc cgcctcctag 10800
 gctcaagcaa ttctcctgcc tcagtctccc aagtagctgg gattacaggc ccgtgccact 10860
 actgcccagc taatttttat atttttagta gagatggagt ttcaccatgt tggccaggct 10920
 ggtcttgaac tctgacctc aaatgatcca cctgccttg actcccaa tgttgggatt 10980
 acaggcgtga gccactgcgc ccggcccag ctgcctgtt tacacctttg ccatattccg 11040
 gtgattctct ctcccctccg tccccggcc ctgactgtgg tggccactcc ctgccgtcat 11100
 gagcccgat gtctcactc ttccctttc cgcaggact tcaaccaaca ctgcagagcg 11160
 cagggtccag ctccagcact gagttcagc tcttctcacc aacagacagg caggaaagaa 11220
 aacaaactct gagaaggcca aggttcccgg gcagccagca agccaagcat ccttctccgc 11280
 tgaggcttgt gcagccgagg cccccctcc tccagggagc aggcagcgtc ctggggcagt 11340
 ctgcgagggg gaccagggcc cttgctccac caggggccca ggtatggggg cagcagcaaa 11400

ctcatggctc tgggagccag accccacctg ctagaacctc ctatgccacc tgctgtgggc	11460
aacccccaggc tgggtgacttg ccttggcctc ctctgtaaac aaagggtca tccaacctgg	11520
tcaaaccact cctccccctc aagggctctat aatcctccct taacctgctt ggtccaaacc	11580
cctgggtgctg ccaggctact caggaggcag ctcatctgga ctcttccct ggggtccagtt	11640
tctctctcaa cattgccttt gagggccagg tgaacggtca acagcgaagg gccccagagg	11700
tgatggagga gcgggtgtcc aagacactca ccttttctaa tgactgact cctcgtgga	11760
ctcacttgctg ccgtctcccc caccaccca gcccagagc ccagagtgcg agcgccagag	11820
gcccgggatt ctgtctgcac cgcggggtcc ccagtgcctc ggagcaatgc cagcaccgg	11880
caagtgttcg acaaatgcct gctgaatgag caaatggatg gatgaacgaa tgaatgagca	11940
agcagatgaa tgaatggggt gctgtccaga gccgtgagga ctaggccgcc caagtcccca	12000
tttctcaaat tctccttctc ccgacttggg aaacaagatg cttgggtcggg gaggtctctc	12060
aaccatcccc tgcagcagcc ggacacagcg acagaccctt tgatgtaaca gccatgtctt	12120
cattaaagat gccctgctct cagaaagaga aagacaaata caaacctgga aaatcctcac	12180
caaacgcagg acccctgccg gggagcagag aaaagaccca cagccacgg gcgccacgac	12240
cacacacaca cccagccgc tgcacacaaa cacagaccct agccagcaag aacaggggga	12300
ccaggaaact gttcctaaag tcaggacccc catgtgctca gacagcagt agagcaagga	12360
cacttctcca tccaccgat gccaggagag tctttttagg gggccccaca ccgagactct	12420
gcccttagga ctgttctga gtgtggaagc cagcccactt ggaagcccc tgccctccc	12480
agtgggacac cggcacagga agcaggccct gtccccacc actttctgca agctgggccc	12540
catcacgcta cagaaacggg gaggactggt ccagggatg gcgctttcct gacacctctc	12600
gttaccctct cgttgccag gcccagggt cagccccaga ggccagactg gctatcccag	12660
gcccgggagc atccccgaag gcgagctgca tctgaacgt gtgtgatttc ccgaagggcc	12720
cgccccgaac cgacacctg aaagaaagat cctcagccgg tgccccagag gagaagagcc	12780
atgcctcact gcaacacagt ccaggaagc accaagtgcc tgaggaccaa ggcggagagt	12840
aaaaaagtgg aaaatatctg gggcaaaaat aaaacaaaac aaaacaggat tgacctctg	12900
ggctcaagca atcctcccaa ctacgttcc cgagtagctg ggaccacaga cttgaatcac	12960
cacaccgcc aagtggatca tttcgaacgg gtttgccgag gttccttctg gggcaccccc	13020
ggcgccgca acccattccc gccaggcccc gcccgcgccg cccgccccgt cccgtccac	13080
cgctcacct gccttacag tctgcccgt gtctgcagc tgcacaccg tggggcaggc	13140

gcatgtgtag aaaggctcgc ttggggacag caggcacagg tgggagcagc cgccattgtc	13200
ctcctcacag cgagtgtgga ctgagaaaac caggacagac tgagagaagg ttccagaaga	13260
ggaccgtcac ttgtttctga atgagtcaca tctgctctg tccccctga cagcctccag	13320
tgtgtccctc tgcccaaaca tcggcctcaa gtggcatcag ggacctcccc gcgggcacca	13380
ttccacctgc ctcatcgctg gccccgtcca catggggccc tcagcctggc cagacggcct	13440
gcaatttccc caaaaccagc cgtgaccttc ctggccaccc tcacaccag atgtgacctg	13500
cccatggagt gacatcctcc ccatctgctt cctcccacca agctcctatg actagaacac	13560
cctccccagc tctcggagc ccccaaagga caccctctg caaaggctgc cccccacgt	13620
ccaatggcgc gggtcaggac ctgcctgtgt ggtagtgacg ggaaccccag agacaatggg	13680
ctcctgggca aaaggcttgt cttgtctttg tgctatgtgt ggaccagca gcttccatag	13740
gaacactgtc cttcttgctg ggatggccaa gcttgctact ctcccaagcc ctctatgac	13800
caacagcaat tgaacggaac tcgataaatg cttccagcac ctcatcaca ccaggggaaa	13860
gctgggtgta gcagcccaa aatacggata taactggaac acaaaactca tcaaatgaa	13920
cctctccctc cctcatgctg cccaagtgt agatgggttt tgtgaccag actttctcac	13980
caggaaacag ctccagagag cccaccctc ctgtgtcctg ctctgggaac agctggcacc	14040
cctaggcccc acatttcaat tcaaagtcca aaccttccat aatggcctgg ccagaaatct	14100
ccatccctgg tccctgtggg agtgggccac tgtccccaga gccgcagccc cactgtcaca	14160
gaagctggtg catttccca tcaggacct ctgtcacaa ccagcgtggc cccaggtg	14220
agaactgctg attctgggca gattattcat tgataaatac gcgacttgca gggccaagca	14280
tggtggctca tacctgtgac ccagcactt tgggaagtca aggtgtgagg atcactggag	14340
cccacgagtt tgagacaagc ctgggcaacg tggcaaaatc tctcatctct attaaaaata	14400
catacacaca cacacacaca cacacacaca cacatatata tgtatatata aataaccata	14460
tatatatata cacacatacg tgtatgtgta tataaatata tatacacaca cacacagaca	14520
acttcttctg ggcttgaaa acgaggcaac cttccttga aatccccctg cactgtctga	14580
gctgaaata gccccatga gctctgcaga ggggtcctct gcaggcccgt gtccccagc	14640
cagccacaca cctccctcca ttgcagcagg tacccttta gagagggggc cccccagagc	14700
atgggtctct gcaggagggt gtcacctgcc cccccaccc acccacgccc gcgcaccccc	14760
acgccccgc atctccccc tccctgccc cgcgcccccg ctccccccag cccctcacc	14820
ctctcccccg tgcccaacc ggcactcaca aaaaggctgc cgctcctggc tcagcacctg	14880

gatgtccatg ggtgagtata gggcactcag gatctccttc ctcttcccc cagtgcgctt	14940
gttgcaggca tggatggagc gggctctgcc gtctgtccag tacagagtgt ccccgagag	15000
cgtcagggcg aaggggtgcg tcaggtgcc ctccaccacc ttctgcctgc agtcagggaa	15060
gcggggtgga ggagccatca ggaggggtccc ccgacagtca ttgctgctga cccaattaat	15120
ttcttttttt ttttttgaga tggagtctcg gtctgtcgcc caggctggag tgcagtgatg	15180
taatctcagc tcaactgcaac ctccgcctcc cgggttcaag caattatcct gcctcagcct	15240
cccagtagc tgggatcact gatgccacc actacgcca gatgattttt gtatttttag	15300
tagagacagg gtttcatcat gttggcaagg ctggtctcga actcctgacc tcaggtgatc	15360
caccacctc agcctctcaa agcgtgga ttacaggcgt gcgccaccat gccaggcttc	15420
ccatttgctt tcaaccagac aagtgaggcc aggtcaagag cccaggagc tggcgccctc	15480
gtacatttct cccggcgtgc acagggcacc tcccaaacac agcctgtgat ggtgacacac	15540
gggtccccc aggtcaagtg gcaaagtctc cccaggga gaaaggagga agccatgcct	15600
ggcaaaaagc acacctctcc tgcccaacgc tttaacctct gtatacaaat caggccatgt	15660
gcactcgctc cttcttacia tgctcataat ttatacttcc agagtaaag aaacttgga	15720
tcaaccgag aaacagctat tcttttctag atgttacag tgcccagcaa atgaggactc	15780
gggtgtaatg agattatgga cactggaaac aggatcataa tgtgacgtgg tcggtaatgt	15840
gcagttttat ttgcttaatg accctcgccc cgtgacaggc tccctgaggg tgggcctggg	15900
ggcagaggtc cccgccacgt cccagccct cagcacagt gccaggagag ggtgacactc	15960
atgaagtggc acaggaaga tgggagctgt gggctctgca gatccaccac ctcttctgtt	16020
catttttgtt gatgctgttt tttaagaaaa ttattgaagt aaaattcaca ggacatacgt	16080
ttactttttt tttttttttt ggagatgggg tctactctg tcaccaggt tggagtgcag	16140
tggtgtgatc tcagctcact gcaacctctg cctcccaggt tcaagcgatt ctcccacctc	16200
cgctccaga gtagctggga ccacaggcgt gcaccaccac accagctaa tttttggggg	16260
gtatcttttt ggtagagaca gggtttcgcc atgttgcca aggtgggtct tgaagccctg	16320
agctcaggcg atccaccgc cttggcctct caaagtgtg ggattacagg cataagccac	16380
tgcaccagc cttaaatttac cactttaag tgaatagtgt tacctagtgc attcgcaagg	16440
cgggtgcagc tccacttctg tctagttcca aagcacttcc attgccccac aggcaaaccc	16500
cacaccggc agcagtcag cccagtcct cgccccagc cccggcaaac acttttgatg	16560
gacttaacta cacacattct caacatctca tataaacgga atcacaatat acagcctctg	16620

atgtctgtct	tctttgactt	ggcaccatgt	tttcgaggtt	catccaggct	gtagcatgtc	16680
agtgttcat	cccgtttttag	gggtgaacca	tattccagtg	tgcagacaga	aaccaatctg	16740
tgcatecatt	cacccactgg	gggacctttg	tgtcatttcc	accctcggct	gttgtgcaca	16800
gtgctgtac	ggacattact	gtccattcac	attttgtgtg	aagacctgtt	ttcgattctt	16860
aagagtatac	agctaggagc	ggaattgctg	ggtcatacgt	aaatcaatgt	ttacgtctca	16920
aggaatcaac	aaactgtttt	ccacaatgtt	gtcttttttg	tttgttttct	gagacagggc	16980
cttgcctctg	cacccaggct	ggagtgcggc	gggtgatca	tggctcactg	cagcctcaat	17040
ctoctaagct	caatccatcc	tcctgcctca	gcctcctgag	tagctgggaa	cacaggatatg	17100
taccaccatg	gccagctaatt	tttctaattt	tatttttttt	tgtttttgtt	tttttgagac	17160
agagtctcgc	tctgtcgcgc	aggctggagt	gcagtgggtc	catctcagct	cactgcaagc	17220
tctgcctccc	gggttcacac	cattctcctg	cctcagcctc	ccgagtggct	gggactatag	17280
tcaccggcca	ccacgcctgg	ctaatttttt	tgtattttta	gtagagatgg	ggtttcaccg	17340
tgttaccag	gatggctctg	atctcctaac	ttcatgatcc	acctgccttg	gcctcccaaa	17400
gttctgggat	tacaggcgtg	agccaccacg	cccgacctta	cttttaattt	tttaatttta	17460
ttattttatt	ttattttttt	tttttttgag	acagagtctc	gctctgtagc	ccaggctgga	17520
gtgcagtggc	gggatctcag	ctcactgcaa	gctccacctc	ccaggttcac	gccattctcc	17580
tgcctcagcc	tcccagtag	ctgggactac	aggcgccac	cacgatgccc	ggctaatttt	17640
ttgtattttt	agtagagaca	gggtttcact	gtgttagcca	ggatgatctc	aatctcctga	17700
cctcgtgac	cgcccgctc	agcctcccaa	agtgcgggga	ttacaggcgt	gagccaccgc	17760
gcccagcctt	tttttttttt	tttttttttt	ttttgagata	gagtcttgct	ctgtcgccca	17820
ggctggagtg	cagtggcggg	atctcagctc	actgcaagct	ccgcctccca	ggttcacgcc	17880
attctcctgc	ctcagcctcc	cgagtagctg	ggactacagg	cacccaccac	cacacctggc	17940
taatgttttg	tatttttagt	agagacgagg	tttcaccgtg	ttagccagga	tggtctcgat	18000
ctcctgacct	cgtaatccgc	ccgcctcggc	ctcccaaagt	gctgggatta	cacgcgtaag	18060
ccatggcgcc	cagcccatgt	ggccattttt	cagtgcagaga	agccagaggc	ccatcactct	18120
cggttgctcc	ctgggccatg	ctctgcctca	gccagaagca	ctgagggaag	gtcagcctcg	18180
gcccttgccc	cagccacagt	cacagataaa	ggggcctgca	caggctctgtg	tggctccaga	18240
gctcgtcacc	caacacacga	cgcttccatg	tgaatagccc	cagggtgcac	atgaagagcg	18300
atggccgctg	cagaggcaga	agaatcccg	ggggaagcag	gtgggagaga	ggctgagaac	18360

agaccagacc	ctggagctac	agaccctatg	ttccaaccct	ggctgggact	agctgtgtgg	18420
ctctgggcaa	attcacatgc	ttctctgtgc	acaggggatc	aaaatagcaa	acacaggcta	18480
ggcacagtgg	ttcacaccta	taatcccagt	gctttgagag	gccgaggtgg	acacatggct	18540
taagctcagg	agtttgagac	cagcctgggc	aacatggtga	aacctcgtct	ctacaaaaaa	18600
aataccaaat	aaattagcca	ggcgtggtgg	tacgtgcctg	tggcttcagc	tacttggaag	18660
gctgaggcgg	gaggaacact	tgagcccaag	aagtcaaggc	tgtggccgcg	tgtggtggct	18720
cacgcctgta	atcccagcac	tttgagaggc	tcagggtggg	ggatcacttg	tgatcaggag	18780
ttcaagacca	gcctggccaa	catggtgaaa	ccccgtccct	actaaaaaaaa	tacaacaatt	18840
tgccaggcgt	ggtggcgggc	acctgtaatc	ccagctactt	gggaggctga	ggcaggagaa	18900
tagttagaac	ttgggaggtg	gaggttgtag	ttagccaaga	tggtgccgct	gcactccagc	18960
cagggggaca	gagcaagact	ccatcccaaa	aaaaaaaaaaa	acaaacaaac	aaacaaaaaa	19020
agaggtcaag	gctgcagtga	accatgattg	tgccaatgca	ctccagcctg	ggtgacaaa	19080
tgagaccctg	cctcaaaaca	ataaaaatat	aaataaaaat	aaaacataat	agcaaacggt	19140
tcatagaggt	ggtatgagca	ttaaatgaac	tgataaacgt	ccttggaaaa	cagtaagtgc	19200
tatggaagga	ttcgtgccc	ccaccgccac	caccattagc	atgtttcaac	ctccatcacc	19260
ctcactgtcc	cctgtcacca	tcctttgacc	agggcactcc	cagctgcagc	ctttctatcc	19320
tcttgtccac	ccttcataac	tgtaagatca	ctcagctccc	aagaaccaca	gtctacaggg	19380
taaccacatt	tccaaatctc	aaaccagacc	cgctggtctg	cacttccagg	gacaacagga	19440
tattttcaaa	ccagcccaaa	agagatgtgt	ggctcagcat	aagaggaaca	ggagaaactg	19500
aggcctcttg	ccctgagaat	gagcttgga	gtggatgtcc	cggcctcact	caaaccttca	19560
gatgactgag	gccagccag	gagcttgagt	gtaccctcag	gtcataccct	gagccagaag	19620
caccagcta	atccactcct	catcactgac	tcctcccca	taaaaaacct	gtttgctgtt	19680
tcaggctgtt	aagttgtggg	ctgttttgtt	acacagcaat	ggataactaa	cacacgaggc	19740
ctggcaagtg	tggagcaaag	ctgcccaagc	cctcaagtct	gttcatgtgg	gtgttgccct	19800
gtgtttgcag	aaatccagcc	actgagtcct	cccagtcagt	cactactgcc	ctctgcacag	19860
acacctgcca	catccctgcc	tgggccagga	gtccactag	tgcaggaatg	gggtctgccg	19920
tcccaggagg	atccctgaca	cctagcacag	ggctagcagc	aggcagcact	tggttagtga	19980
ataaactgcc	cttcacctgt	acacagaagg	gatgtttcta	taaggggtaa	ttaagtacag	20040
agctgggaag	ctatgctgac	cagaaggctc	taaaagcaat	taaccaacga	ggggaaaacc	20100

ctctactc attctcgcc cattttattg agcactgacc atgtggaagg cccctggtg 20160
 agactgggga atgcaccaat aactgagaca gcttccggct gttgccctca ggatgcctga 20220
 gctgggatag ggccaggggtg ggggtggtgc gtgtgacagg gttactgttc acaacctgc 20280
 cgggccataa gccctcccca acaattccaa aatccaaaac gctctgaaga tggaaagctt 20340
 ttgttgctca tctggtgaca aaacctcatt tgggtgatgg gccgggtgcg gtggctcacg 20400
 cctgtaatcc cagcactctg ggagccgagg ggaaggatcc cttgagctta ggagtttgag 20460
 accagcctga gcaacatgtg agaccccgtc tctacaaaaa atacaaaaat tagccagggtg 20520
 tgggtggcgca ctctgtagt ccagctact cgggaggctg aggcgggagg atcgcttgag 20580
 cctgggaggt gggggctgca gtgagctgag attatgacat tgcactccag cctgggtgaa 20640
 agagtgagac tctgtctcaa aaaaacaaag ttaaaaaaaaa aaaaactgtg catgggtgtg 20700
 ggctacagat agtcttttct gccctactta gaatgaacgt gccacatttg ctatagaaat 20760
 attcaagggc tgggtggcaa tgccacacag accctgacgc tgttccaagt tctgagaagt 20820
 cctgcattcc tcagggtccc agagtttcag agaagagtct gtaggcctga gttaagaagg 20880
 aacgccttca aaagccctgg ggacaaagg gaaaggggtg cccaggact gcgtgggtac 20940
 ctaccggaac gagccgtcca ggttggcacg gtggatgaag ctgagcttgg cgtcagccca 21000
 gtagagcttc tgcctctcca ggtcgatggt cagtccattg ggccagtaaa tgtccgagtc 21060
 cacaatgac ttccgggtgc tgccatccat cctgcccgc tcaatccggg gcgtctcacc 21120
 ccagtctgtc cagtacatgt acctgtgacg ggggcagggc aagagaagca gctaacacag 21180
 atctgttttt tgtttttgtc tgcatagatg cagacatgaa acaacagaca gtgaacttgc 21240
 cctaaaatct caccatcgg aaataaccaa caggatggt ttcaggtatt cctgccttaa 21300
 gctgggcaat caaaatatac tatttccaac ttgttctcag ttaacagtaa attctgggca 21360
 ccttcccttc ttgtggatag aaagattcct tgttcttttg atgattgcct agtgactct 21420
 gctgtaagtt ttttaaagaa cttcaggtta tttctgattt ttttctacc atgaaaaatgc 21480
 tgtaaataaa cctctaaaag gcaattcaaa acactcagga tggaatatta ttagtggtga 21540
 taaagaaatg agctatcggc tgggcccagt ggctcacacc tctaatacca gcactttggg 21600
 aggccaaggc ggggtgatca cgaggtcggg agatcaagac catcctggct aacacagtga 21660
 aaccccgctc ctactaaaaa taaaaacat tagccaggcg tggtagtgag cacctgtagt 21720
 ccagctact taggaggctg aggcaggaga atcatttgaa cccgggaggg ggaggttgca 21780
 gtgagcagaa atcgaccat tgcactccat cctgggcgac agagcgagac tccatctcaa 21840

aaaaaaaaa aagaaaagaa aagaaatgat ctatcaagcc atgaaaagac atggaggaaa	21900
cttaaagtca tgttagtagg tgaaagagcc aatctgtatg agtccagttc taaacactct	21960
ggaaaaagca aatacacaga gacagtaaag catcagtggg tgccaggagt tggagaggag	22020
agggatgaat gagtggagca cagaaaatca gggcagtggg actatcctgt atgacatgga	22080
atggtgggtg catgtcctta ctcatctgtc taaaccaaga atgtacaaat caagggcgaa	22140
ccctcgtgta aacgtggatt ttgggtgatg gtgcgtcagc cagctttcat cagttgtaac	22200
aaatgtacca ccctgcacag gatgctgaca gttgggaagg ctgtgtgggt gtgaggacag	22260
ggatgtatag gaactcagta cctgctgctc atcaattttg ctgtgaacct acaactgttt	22320
gaaaaatta agtctattta aaaacaacaa aacatggcca ggcacgatgg cttgcacctg	22380
taattccagt acttcgggag gctgaggtgg gtgggtcact tgagccaccc tgggcaacat	22440
ggcaaaatcc cacctctaca aaaaataaaa attaaaaaaa agttagctgg gcatggtggc	22500
acactcttgt agtcccagct acttgggagg ctgacgtggg aggatccctt cagccctggg	22560
aggctcagggc tgcagtgagc tgtgactgta ccactgcact ccagcctgga tgacagagtg	22620
agaccctgcc taaaaaaaaa aaaaaaaagg ctgggtgcgg tggctcatgc ctgtaattcc	22680
agcgcttttg gagggcgaga tgggaggatc acgaggtcag gagatcgaga ccatcctggc	22740
taacacggtg aaaccccgtc tctactaaaa gtacaaaaaa aaaaattagc cgggcatggt	22800
ggcggacacc tgtagtcaca gctactcggg aggctgaggc aggagaatgg cgtgaacccg	22860
ggaggcggag cttgcagtga gccaatgaca caccactgca ctctcagcct gggagacagc	22920
aacactccgt ctcaaaaaaa aaagaataaa acccatggct gggatggacc ctgaacctgc	22980
agctgcagct gttcctgggt aggtctgtgg gcgacgtggc tttgcttctc catgttccca	23040
agagacaagc atcacccatc catgagaaac aagcacatcc tcagggcgcc cttacgtgat	23100
ctctggccaa tgaaccaaga caaagtgagc agacaccagg tctgggatgg caggtcccac	23160
ccccaccagt gccagtggtg ccctgttttg aggtgaccac aggggtgtgtg cccagaggct	23220
gggcgtgact ctccagcggag accagagggg aaccacacca gcttgaggga ctcagtcccc	23280
atcccagcca gctgggatga gccacaggac acaagggtg gcagacctat tgtgttttgt	23340
ccacccttca cagcagagaa aggggacagt gccagaatg tcctctgagg agcctcctcc	23400
cactcttggt ccttgtaaaa tgggtgctgac tcccttgctc ccttcttctt ggggtgggcg	23460
gcaaacccca tccccctcag ccttagcaag tgatttagaa acaggcagct cgcccaagcc	23520
aggcatgaga gtgatcccg gacacagga gaacaagccc cgctttgccc tctgggggtc	23580

tccattcagc agaagaggca aatgacagac acacagccgc ctctccccc accatggtgc	23640
tctgcagcct caggagcctc aggtgcacca agggccaccc catccagggg gccatgcttc	23700
cttgagtggc atcgcttctg agcgagtacc atctccacct tccagagggg ctgtgacaag	23760
atcaacaaga atgagggcat aggagcctcg aaccaaaccat gccctcttcc ctgcagaggc	23820
tgactgcgcc cagctgctat caccaagccc ctgctcctcc gggcccgtag ggacagggta	23880
agaggggtgt cacatggaac agctctccaa acagtccttc tcaagctgct gtctcctgtg	23940
catctagtga gaaccaacc aacaaaggga aggtgggaat tgctattccc attaggcaga	24000
tgagaaaact gagggcccgga aaggctggcc tgttccaggt tacaggcgct gagcggtgc	24060
tctgggaaca cacttggtgt ctgctgaggg cccgagcccg gccatcatat gactcacct	24120
tcgccagcaa agcccgggtg tgggtgaact tttcctggca gcctgggact ccaagtgct	24180
ggcagccagc ccaggggaagg ctcccgcgtg cctgcggcag acgccttgct ttacctgcac	24240
gtccccaccc ctaggagcct ggacagagcc cagacctcc gccacctcc gagaaggat	24300
caggggcac agtctggact tgggggggaa tccacacagg cttccccaa atgtccacc	24360
gtggcccatg gaaaaggctg gaaaacgtgc aggagcagga gcctccgat ggagcataat	24420
tcacattcct tccccagtt tcataacaga ggctgctgg tttccttaa tggggaattt	24480
gcgagccagt cggtgaccag agactggttg gcgtggacgt gctcttgag agtctcaaac	24540
gctaccacaa gccagccaa attccacgga ggaaaatcga cttccgaaga aaagagctgc	24600
agcatggcct tcgtgcagag ccagctgcgg ttgtggtgt gtgttatttt aggggaagggc	24660
cattttgcat tttaaagagg gggttgggtt tcacctggc tttatttga gacccggggg	24720
ccactgcagc cccttgtag gctggtacag gccggggact cctcccatgc taagccagt	24780
tctttctggc ccagatcct caggggccag agggcatcc ccagagcccg ctctgccacc	24840
cacatgggta ccctgggcct gggagggatg tgcttccct caacctgcc tggatgtccg	24900
cacggggcca cctgcattgc tgaaactgca acgaagtga gtctcaggag gggccccct	24960
ggctgcaggg ctcttgatcc ttttgccac gtgcacactg aggtggacgc tcggaccag	25020
agacccccct catgatgat gccggggcag gaacccccct ctctaggaa ggacctggt	25080
gggggacagc actgcaggag ggcacaggag atgacgggg ctctagcagg gccgggagga	25140
aggccaagat gctcctcga accgtgtgcc tgtggccagg acagaggaca aaccaccct	25200
ccactgtccc cactctcagg acagcagtcc tgccccagga ctccagcccc acacttatgc	25260
ctgaggacca ctattcaagt cagtatttgg cgagcagggg ttgctgccgc gggcgctgtg	25320

acaggctgga atcctctccc tctccctctc cctctccgga gacatggagc ctacaggga	25380
agagtcagca cctcagggtg ggaccatggc tggcgatc agcatcactg gatctgatga	25440
gtgggagccg gcatctcact gttttcactc tctcattcaa atgactggag caaagggaag	25500
gtgtggggag agggccagga atcaacacta aggtcaactt tgcccccagg ggcaggggtg	25560
ggagtgaaca gccacagggtg tgatcctggg gagggcttct gggagagaat tcagaggcaa	25620
gcatgtagag gaaccatttc aaatagttaa gaaaagccag agccaaacag ggacagttgg	25680
ctcgcagaga tgatgcaggc aaagccagct cagatctgag catgggaaag actactcca	25740
accaagggcc cagcatctcc caaccaagca ccaagtacct cccaaccaa tgccaagcac	25800
ctcccaatca aatacctccc aaccaagcac ctagcacctc tcaactggac accaactact	25860
cccaaccagg caccaagtag ctcccaacca agtgccaagc acctcccaac caagtaccaa	25920
ttacctccca accaagcgcc tagcacctcc caactgagca tcatgcacct cccaacagag	25980
catctagcac ctcccaactg atcacctccc aacctagcac cgagcacctc ccaaccaagt	26040
gcagagcacc tcccaaccaa gtgccaagca cctcccaatc aaatacctcc caaccaagca	26100
cctagcacct ctcaactgga caccaacaac tcccaaccaa gcgccaagca cctcctaaca	26160
aagtaccaat caccttccaa ccgagcacct agcacctccc aactgagcat catgcacctc	26220
ccaacaaatc acctagcacc tcccgactga tcacctccca acctagcact gagcacttcc	26280
caaccaacat agcaaaagcc ataaagaagt aaaaagacaa aaccacgtag gcatggagac	26340
tggacttctg gtggcgagga aagggcattt ttattataac gacagctaac atttggtgaa	26400
ctcaciaaact gttcttggtg ttttctcat gacatgcagc atggtcacgc ctctgtacag	26460
acaaggatac tgaggcacag agtggcaccc tgccaacctt gtctcatctt tttatcgaac	26520
ctacatgcag agtgccagca aatccagctg tcttttctct tcagaacaga tcccaaactc	26580
cgccactcct tacccccaca agtgaggtgt ccccgctgct gctttctgtc gccaggatcc	26640
cggtataaac cgtggagagg gtcctgccc ccacgccacc caccacacag ctactctcg	26700
ctccagccac caggggatgc cttccagcac gagtcagagc tggcacctcc tctgctcgag	26760
acctcatgtg tctctctctc acaccttggg cctgtttcc ctacattctg ctacagcccc	26820
tcaaacaggc cccgccccaa accagcccag ggcctttgca ctggctgatc cctctgcctg	26880
gaccgcgctg ccccagaca gccacacggt tctcagctc atctgcttcc agtctcgact	26940
caaaagtcac caagaggcct tcccagcacc tgagctccga cggaagcccc tcgccacagc	27000
accaagcac tgctttatcc ccctacgcac acgtcccttt caaatactat tcatttacca	27060

tctcctccca ctcactgaaa gggccagaga ctgggctata cccgctgcgt ggggagcagg	27120
accaggcgca agggctcaca aatgcagtgg atgcctgggt gggaggtgag ggagctgcag	27180
cgacccacgc tgggagggaa cgcaatgaca ggaggagcgc aggtcctggc gacacgatgg	27240
ccatggcagc cgctgggtgag caaccgcagg ccggccctgg gagagggctt ctagcaagct	27300
gctatcttca gcctctccga ctactgcaga tgccccctcc tagccagaga cactgctaca	27360
ccagccgacc cttccaaaaa gaaggtcagt aaccccgcca ctctggagc cacagtgcag	27420
ggggagaggg ctgagagggc aacagttcac caagcggaac agaggctgcc ccggaggtca	27480
gctggctccc cggcagctgc aggggtggct agccactcg gagggcagcg agggcatacg	27540
aggggctcca gggatgagt gttgcccagc acagcaccce tgggaggccg ggggcacttc	27600
tcaggtagtg ggggcacgag gctgctctgg cctgacctca gggactcaaa atactttggc	27660
gataaatcc accgtgtccc acccctgctg gtaccccata cttacacaca gactggttca	27720
gatgcagaca ctctcgcgca catactcgct cacacgggca catacacgtg cacacacagt	27780
cacatgcgca cactcataca cacacaaata tccactcaca cgcatgcatg cacacacag	27840
gacacacaca ggctcacag tatgcacgca tatgcgtgca cacgcacaca cacacacaca	27900
cgctcacatc ctccactcc cacactcagt tgctcagaca cacacacgcc tggctctcac	27960
acaaacctgt tgggctctga aaggctccag cccttcccat gctcgtcaga agccagtcaa	28020
tggcttccta agtcaccaca cagatcaaag aggtgaactt ggccacatgg cactctgctt	28080
cctgagctcc caaacaccag ccttgggtgag gacagaccct caccacacac cctcattccc	28140
actaccctgg gcaggcccag aggaggggca tctgcaggat ctggcaacca gcccctccc	28200
cccggctcct gcagccggca ccatgggagt cagggggagg tcaactgcaa gggcaacagc	28260
aagttgggtg cccaggact agagcccagg ggtcttcagt cctactccag agcttggaca	28320
ctgtcccaca gggcatggcc aagggaaggg cttccagagc cctgacttca gggaggaggg	28380
caggcgggct cctgtggcag gcctggatgc atggccgcc actcctggga ctttctaacc	28440
tagaatatct aggtcaggct ggggtgcagt gctcacgcct gcaatcccaa cactttggga	28500
ggccgaggag ggtggatcac ttgaggttag gagtttgaga ccagcctggc caacatggcg	28560
aaacctgtg tctactaaaa atacaaaacc tagccagggtg tggtagtgca cgctgtaat	28620
cacagctact caggaggctg aggcaggaga atcacttgaa ctcgggaggt ggaggttgca	28680
gtgagctgag atcgtgccat tgcgcaaaga agatctaggc cggccctca accggtgagg	28740
tccaggctgg gagtctgag agactgtggt gacactgaat gaactaacag gcaaaggct	28800

tccaactgag cctgggggtg gtgggaaatg gctcttgtgt tctagtcaag acctctgcca	28860
accagttctg acactgaccc agcacagaac ctgacaggtc agcaagggcc agggcttagc	28920
acageccagg taaggggtgtg tgtacggccc ccagagtcac tcccaggctg caagaaaagg	28980
gacaaaggag ggacaagggg tggccaagca aactgttccc tctgctcggg agtctggggg	29040
gacctggcct agctggccag tggagctggg ccacctcccc ttaaactctc caccgccgac	29100
ttcgactcca aagctttcct gccaccacg ctctccccac ctgggatcac ggccaggccc	29160
tgagccttca agggcccagg tgaactcagc cagactagga gctgaggagg acacagggca	29220
gcttccagaa cggacccgag aaccactccc agcagggttct gcttccagac aaggagctgc	29280
actttttcag ccaatgcaat tagaaagcca ggagaagggtg caaatccac ctgcctgagc	29340
gtccgcactt cccaggccgc ccaccataca cacagcaaag atgtgtttaa ccattcaaac	29400
ccatggccaa ccacatcggt tgccctcagac atgcaagttt taaaaaggaa cataactatg	29460
ggccaggcac ggtgggtcac gtctgtaatc ccagcacttt gggaggccga ggtgggtgga	29520
tcacctgagg tcaggagttc gagaccagcc tagacaccat ggtgaaacct catctgtacc	29580
aaaactacaa aaattagctg ggcgtgggtg tgggcgcctg taatcccagc tacttgggaa	29640
gctgaggcag gagaatcact tgaacccggg aggcgaagggt tgcagtgagc cgagattgtg	29700
ccactgcact ccagcctggg caacaaggga gactccatct caattaaaaa aaaaaaaaaa	29760
aaaaaggaaac ataactatgg agtctcaagg ggaagtaatt ccttcaacaa taacaaatct	29820
tgaaagctga gctctttttt ttttttgaga caggatctcc tcactttgtc gcccaggctg	29880
gagtgcagtg gtgggatcac agctcactgc agcctcgatc tcccaggctc aaatgatcct	29940
cctacctcag cctcccaaga agctgggatt acagggtgat accatcacac ccgattcatt	30000
tttgtatact ttgaagagat ggggtctcac catgttgccc agtgtgggtct tgaattcctg	30060
gactcagggtg atctgcccgc cttggcctcc cagagtgtctg ggattacagg cctgagccaa	30120
cacccccacg ggttcatttt cagagtcgca ccgagtgtctg gggttacagg cctgagccaa	30180
ccccccacg ggttcatttt aagagtgaca ccgagtgtctg gggttacagg cctgaaccaa	30240
ccccccacg agttcatttt cagagtcgca ccgagtgtctg gggttacagg cctgagccaa	30300
ccccccacg ggttcatttt aagagtgaca ccgagtgtctg gggttacagg cctgagccaa	30360
cacccccacg ggttcatttt cagagtcaca ccgagtgtctg gggttacagg cctgagccaa	30420
ccccccacg ggttcatttt cagagtcaca ccctttttct gaaaaacaac ttggggtcat	30480
gcaaattcga gagagagatg gtgacactcc ccgcccctg gaccagggtg gagtgcgagc	30540

aggggtttacc	cgtgagcggg	gtccaaggcg	atggccctcg	gctgggtcaag	gtcctgccag	30600
aagagcacct	tccgggatgt	gccattgagg	ttggccacct	cgatgcgggt	ggtctctgag	30660
tccgtccagt	acagcttctt	gcccaccag	tgcaggcga	ggccgtcggg	agagaccagg	30720
ccggagatga	ccacgttctg	cacggcggcc	cccgtctggt	tcaggtaggt	ctgcttgatg	30780
gcctcctcgc	tcacgtctgt	ccagtacacg	gctcccttgg	aaaactggaa	gtccactgcg	30840
gcccgcatect	ccaggccgct	gaccacgatg	gtggactcca	gcttgactcc	gccggcgctc	30900
accagccgta	cgtcccggcg	gttggcaaat	agcaggagcg	gcgaggctgt	ggggcagaag	30960
caaaccgtga	gggccactgg	ctaagccagc	aagatacaca	gccctgggat	ggagcactat	31020
gcccagagca	ctcctgggtac	tgccttgccc	atgcccaga	cctccagttc	cttctcccca	31080
cccctaaggc	gttgtcagga	agttgcctgg	gcagccccgg	cccgcacatc	tcagaggctc	31140
ctgcagcgca	gcaaacagcc	ttcttccac	attcgggtgac	agcacctgtt	tgtttaccaa	31200
ctgttacgtc	tgttccccca	gatatgggtg	acccttctctg	ccatgcccac	aacctccac	31260
atcgtcctcc	agaggctaca	ggggccctgt	cctgttctgc	agagaagcca	catccccctt	31320
gttggcctga	cacaggggat	ggggacatgc	aggcacagca	ctggccatgc	tgctcgctac	31380
agaccagcc	acagggccac	atTTTTtgag	gggttcagag	cccaggccag	acagagcctc	31440
aagattccct	tacaagtctt	tgaccactgt	ccaagctcag	gcccgtttcc	ttggccgtgg	31500
catcagcttc	ccatccaccc	ctgtattcca	tgtttctccc	accctgcttc	tggacattcc	31560
tacatttaaa	gggtcactct	ggaatgccac	cccttggtc	agacaccttc	cacagctccc	31620
tgtgccagtg	ccatgcagaa	caaggtcaga	ccccctagcc	tggcctccaa	ggccttggcc	31680
tctggcctca	cctacacttc	tctccaccac	cccaccccaa	gcattcctga	tctgcctgcg	31740
gccaggctgg	ctccctcacc	tcctgtgca	ccgcagccct	cagccccctc	tgctgtgca	31800
agaagcctca	tctcacagac	aacggtctca	ttccacaac	gggtcaatg	agaaatcagg	31860
agaggccttc	agaccatcac	cccaccagac	acctcagacg	tcggaccagg	agggtccagc	31920
aacccccaac	acagactcag	agggactaag	aagccacatg	aggagtgaac	acaagatgtg	31980
gacaggagga	gggttaagggc	ctccaggag	ctccatcagt	ccgtgttctg	ctgtcagcag	32040
ggttaggctg	ggctggccac	aaacaccccc	aaaaaacatc	tgaagccttg	gcttgaaaca	32100
gctgacattc	ctcatgaaaa	ctgcagaccc	ctgggtcctc	ctgcgcagat	gggggagccc	32160
agccaacccc	acactccac	cttcaccaag	aaagagaaa	ccaaaacaaa	ctcaactcag	32220
ccaatgacaa	tcacagaact	gaatcctgta	gttagttcag	ttggtttcat	ttcagcaggg	32280

gaaagatttg cagcctctat gagggtagct gggaacacaa agggccagag catggcccag	32340
gagaccccag cgcagtgggg tagatggttc cgagcacagg cctccctgcc aagacaagca	32400
ctgggtcaaa tcttggtccc tccattccc aggagacatg ctccacagga tgggaggaca	32460
cacagaggac ctgaggccag gaaaatgaca gcggcgctc cgccgcccc cccgtgctgt	32520
catcatctta ggtctacagt tctttgtggc aacgaggggac actgtgaaag tcaaacaaca	32580
ggaaggcata ggccacaaat aaagacaaac gggacttcat ggaagctaa agattttgtg	32640
catcaaaaga cactatcgag agagtaaaaa ggcaaccac agaatgagag aaaatatttc	32700
caaatcatag atctactaag agattaatat ccatgaaata cagagaactc ctaaaactca	32760
acaatgagaa aacaactaag ccaactcaaa aatgggcaaa caacttgaac agacatttct	32820
ccaaagatga catataaatg gccataaac acatcaaaac aggcttaata tatcccta	32880
catcaggga atgcaaatca aaactacaat aagataccat cttgcaccaa ttaggacggc	32940
tactatcaaa aaaacaaat agcaagtgtt ggtgaggatc tggagcaact ggaaccctg	33000
tgcaccactg gcaaaaatgt gaaatggtgc agctactatg gaaaacagca tggcagttcc	33060
ccaaaaactt aaacacagaa ttaccatatg acccagcaat ttcgctttgg gttatatacc	33120
caaaagaact gaaaacaggg acacaatcag atatgcatac accttggatc acagcagcat	33180
ccttccaac agctaaaaca tggaggcagc caggcatggt ggctcacgcc tgtaatccca	33240
gcactttggg aggtgagggc ggggtggatca cctgaggtca ggagttcgag accagcctgg	33300
ccaacatggt gaaaccccgct ctctactaaa atacaaaaat tagctgggag tagtgacggg	33360
cacctgtaat cccagctact cacaagtctg aggcaggaga atcacttgaa ccctggaagt	33420
ggacgttgca gtgagccaag attgcccac tgcattccag cctgggtgac acagcgagac	33480
tctgtctcaa aaaacagcaa aacaaaaaca aaaaaacaaa caaacatgga agcaacccaa	33540
gcgtccctct actgagggat gaatagcggg gcaaaatctg ctccatccac acaatggagt	33600
actattcagt ctcaaaaagg aaaaagattc tggtcaggca cgggtggctca tgccgtgaat	33660
cccagcactt ggggaggctg aggcgggtgg atcacctgaa gtcaggaatt caaggccgc	33720
ctggccaaga ctggcacna gctacacana aagtatang ccccgaaa	33769

<210> 9

<211> 72049

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (8356), (8385), (38585)

<223> Identity of nucleotide sequences at the above locations are unknown.

<400> 9

tataccttgc gcggaaccttc ggctcctgtg gtgaagacaa tatgaagaaa atagaaatta	60
cccataatTT tggcacacag acttagttgt gtccatgtat cttgtgcacc ttttttctgt	120
ttacggatca aaatcgactt ttagggctag gcgcgggtggc tcacacctgt aatcccaaca	180
ctttgggagg ctggagttgg ggttggggggg tggatcactg aagatcagga gtttgagacc	240
agcctggcca acatggcgaa actccatctc tactaaaaat aaaagattag ccaggcgtgg	300
tggtgggtgc ctctaattccc agctactccg gaggctgagg caggagaatc gcttgaacct	360
aggagacaga ggttgcagtg agccaggatc acgccactgc actccagcct ggcaacagag	420
cgagactctg tctcaaaaaa aaaaataaaa ataaaaataa taaatacata aattgacttt	480
taggagattg gttcaaacia tgtgtgtaat gttgtgtctg agtgtttttc atttatcggt	540
catgcaaatt ccgacatcat tcaactcttct ccagagtgtg ctgttttctt gcctgtgtca	600
tcacccgtca ccttgaatgc cctcgtttag gtaaaataag tacattttat tcaaaaatat	660
ttgaggacat ttgggttgtc tccaggttct tggctctgag ttttgctgtt cttgtggagc	720
catggtggtg tctggttgca ggaacctcca tgcgttccag ctgctgcttc tgctgtgtt	780
cttagagagg aaatgctggg gtccgcggtt cccgggctgc tgaccaggaa gcctgcggtg	840
ctttacggcc cttccagaag cgggagatgc cccacttaa gtgtcagaca ggcctttcca	900
cctcactggc agctctgagc ggctcccttc tatttgcaga tgactgagaa gttaccaatt	960
tccacgttta ctgactgtg tttctcctgt taatttgtat ttatagtctt cgctaattta	1020
ttgctagggg tttggtgttg tccctattga cttgtatgcc ttttaatttt ttaaacaaca	1080
ttaatatact tcattttttt agagcagttt taagtttaca ggaaaattaa gggacaagta	1140
cagagagttc cttccacctg ctgtcctcct ctctcctcc ccacctccc tccttcccct	1200
attgtaactt tctttctgat attataaaag tcactcatgg ctgggcgtgg tggctcacgc	1260

ctgtaatccc agcacgttgg gaggcagagg caggcagatc acctgaggtc aggagttcca	1320
gaccagcctg gccaacatgg tgaaaccccg tctctactaa aaacacaaaa agttagccag	1380
gcgtggtggc gggcacctgt aatcccagct actcaggagg ctgaggcagg agaatggcgt	1440
gaacctggga ggcagagggt acagtgagtc gagatcgcgc cactgcactc cagcctgggc	1500
aataagagtg aagcttcgtc tcaaaaacaa agtcacacac gcttcttgta cgagggtcat	1560
ttggccgagg gccagatgg ctcaccatct agttgggaca ggccatgagc tcggaatgct	1620
ttttacatat ttacatggtt gagaagaaaa tcaggagaat aatgttttgg gacatgggaa	1680
aatgacatgg aatttgcat ttagtgacca taaatgaagt tttgtttgct cccagctgtg	1740
ttgactgagg caggctggct tcctacagct gcggcagagc tgaggaggcg ggaaggagac	1800
cgtgcaggcc gcagcaccga aaatatttgc tctctggccc ttcccagagt gcttgccgac	1860
ctctgtccga cagctagaag gaaggatagg acccgctccga cgataaccac tgttgacatt	1920
tgagcgcgtt tccttcccg cttttgtgtg agagtggcag tctgtttgct tttgtggtcg	1980
ggatctgctg cacgcacggc gggctgtttg catgaggctt cctggaggat agggctgggc	2040
tcggagctgc acgcagtggg gcgtgtcctg catgcagtgg ggcctcagaa gagagctgtg	2100
gtgggcgggg cagtgccaac gctggtgggt gccaggcctc cacgctcaga tcagccccgg	2160
cgacaggttt gggccaccct ctctctggcc tctgtgcagt ggcccaggcc gtctgctctg	2220
cctggcacac ttgcctctgt ccttccactg aagcgctcct cttaccctct gctcccggct	2280
gggtacgttg aattgtgtcc ctcaaggaga tatgctaaag gtctaaccac aggaacctgt	2340
gtatgtgac taatttgga acaggggtctt ggctgatgta atcaagcgag gatgaggcca	2400
ccctagagta gggggcctat atccacgggt ctggtgtcct catgagagca ggtgagcaga	2460
cactgacact caggggtgaa ggctgcatgg agtcagaaca gggcttagtg cgatggcggc	2520
cacaagccaa ggaactccaa gtatttcctg caacaccaga agctggaaga tgccaggaag	2580
gacctgccc tggagccttc ggaggaggatc tgccttgca gacgtcttga cttttgattg	2640
cagggatgca tgtcttaggg tgtgtggggg ggtgcatttc tgatgttaga agccacctgg	2700
ttggtggcga tgtgtcacgg gagccctctg caggttctgc gtgtccatgt ggtcggggac	2760
agagggtggc agggacggac ggtgtcgagc tggacatgtc catgacgtcg gccatccctt	2820
gggatggctt ttttgttttg aggataaggc tgctgccag gaagctgtgc cctgcctggc	2880
ccttgcccca agccctggc ctgtgcttgg cctcgcgga gggatgtgc cttctctcc	2940
tgcatgcgtg caggaggaa ggggagaggt cagcagccc cctggaggag gctcgggcga	3000

ggggaagggtt tcactttcag gcaatgttgt ggggctgttt aaacaacccc aaagaaaacc 3060
 atttggccaa actgttagtt tccaaacatt ttacttcctt ggtgtttaaa taaattccta 3120
 ccaagactct gtagctggtc ccagggaagg agttggcctc tcttctttat agcccggcac 3180
 agtcagtccc ctgcacctgc cctcccaac ccaggcctg cttccccgtg gccatggctg 3240
 ctgcccggac ctctctacac acagaacctc ctggaggcca gctgtgggca ccagccttgg 3300
 cagggctgtg gcggagccca ggctgctggt actctctctg cagctgctcc ctgctggcct 3360
 ggctggacag cgtccccacc accactgggg tcacctctgt gctggtcaca gctcactcag 3420
 accttcaggc aaatgggttg gatcctgcct ctctcccagg tgtctcagtc tctgcaaaac 3480
 tcaaaaacct cagaggcctt gcagcctgag ggggtgtcaga gacacctcct tcgaatcagt 3540
 aaacacctac agattcacc cagcagtga aggactgctt cgccacagag gtttgattta 3600
 ctctaagta attggaaggg atgccgagaa taggttcctc atgggtgggac tagaggccct 3660
 ctgctgacct agttaacaga gggctagggc tgggtgtgct cagcccctga aggttctagg 3720
 cccatttggg acaccccgcc agaacctgcc acaacctgcc atgtggtgac agctacctaa 3780
 atcccagagg ctcttgagct ggagagcaga cctctcaatc tcagcaggcc cccacacag 3840
 acccataac cctagtctgc cttcacagta cagttcgtgg ctatgtgttc acggatggtg 3900
 ttgttcacct aaggtctctg cctgtgacc ccaagggcgt cctgagggca gattccaagt 3960
 ctgtttcgtc caccctcct tccctagcag cgggtccagg gcctggcctg aactagcttc 4020
 ccacagagat actggtggga tgatgaaggc agccaggcgg caagtgaaaa acgcacttcc 4080
 tgcattgtgt ggctcctggg attgaagtgt ttgaggaagc aaagtgaagt gagctttcct 4140
 cttgcggctg tgtgtccttg ggccgggagc ctacctctc tgagcgttgg ggtccttgtc 4200
 agtagaatgg ggcacctca tagctcaagg ggtggtgtgt gaaaattgtg ctattgtgtt 4260
 actttaatga tttttttttt ttcgagacaa agtctcacc caacgcgcag gctggagtgc 4320
 agtggcgoga tctcagctca ttgcaacctc tgctcctgg gttcaagtga ttctcctgcc 4380
 tcagcctccc aagtagctgg aattacagga gtgcgccacc aggccggca ttttttcta 4440
 tttttagtag agaggggggtt ttaccatgtt ggctaggctg gtcttgaact cctgacctca 4500
 ggtgatccac ctgcctcggc ctcccaaagt gctgggatta caagcatgag ccaccgcgc 4560
 cggcctactt tagtgatttc ttaggaggac agaggggaac ggctggcaag acaggcttgg 4620
 aatgtgtttt gggatcaagt gccggtttct gtctggcact ggcgttctct gtggggccat 4680
 gatggacaca ctgctgaggt caagcgtgat tcgtcttgcg ctgtgcctgg cagtctcatt 4740

ggaaagttct gtagacatcg tgtggatggg gctcttcccg gccaaagccct tggggacctt	4800
ccaggactgt gatctcccca cagtggctgt taagcagggg cctttcgtga agtggagtct	4860
ctgggtccct ccaagtcata gctagacagg gactcgggca tcgccaagcc tggctgatta	4920
ttcactggat gaggagacag gccagagag gggcaggaac ctgcccaggg tcacccagca	4980
ggccccagag gtttcgggtct cggattctcc ctgctcatcc ctggatgtag tgctgctgtg	5040
gatgtggttc tgtgctgggg gctgtggaga gcagggggct tgtgccagga cccagtgag	5100
ggtggcgccc tcgccatgag gccgactgtt ggtatggggc ggccatccac tggggtgtgg	5160
ggaggaacag ctttcctgag gaggaggtgg cgggaggaac agcttcctg aggaggaggt	5220
ggcgggtgctg tgtgacctgg gccttgaagg acaggtccat tgtcaacaga acattttggg	5280
agtggagcct agagggagaa aatttggtga aattcagatt cccctcccc taccaataca	5340
caccaaataca gatgcccctg accagatcta aatttggtc tcagagattt ccattgtagc	5400
tgggcacttg ggaaccttc taagtgtgc ctctgectct cccagcctg cctgcctcag	5460
tttccccage cctggggcccg tgtcgtgtt gccatcacgt gggcgccctc tagtggagga	5520
atcagattat gactccggg gcttgagca ggagtcagga ggggctcctg tctttccttg	5580
aaacgttgga tgccgggatc ctggaacagt ctctgcattc ctctggcga gaaccagagc	5640
ctgggcacag gggaccatct gttgtttgaa ggctgcagcc tggcagggca ctcaggagat	5700
ctggcagttg gctgcagggc caggtctagg ggccagggca tcagggaggc tctgggctgg	5760
ttcagccccg ggcccccttg cagattgtga cctgggcccc tgtgcagggg catggccaca	5820
ggatgctggg aggggtctct gaccctgacc ttcttggtc tgtgcatcct tgagaccaga	5880
aaggtctgga acaaagtagt agacgatgcc ctaacctggg gagggagcca catcctgatc	5940
ccagcaacct cggaaggat ctgtcaggat tatggggcac cctggggggc ccaagtctgc	6000
atgggtctcc acttgcaatt tctgtaggaa gctctgataa atccaaactg ggggtcctag	6060
gacacagtca gaaatgctga taccgttgtg tgtggagcct cgggccctgg gggtcaggag	6120
catgtggagg gtgggccacg ggggttcaga agagaatcct gtaaccccc accccccaaa	6180
ctgaagccca cttgagggcc atggctgaaa gggtggggg tctccgtgcg tctgtggag	6240
tgggtggtga ggagtccttg ggtttgacg cctctgggcc tgagcggcgg gacccgtcc	6300
acagcggatc cctgggccct gttgctcaga tgctctcaga gtgttgctgt ggccacggag	6360
ggagcctgag ttaagcttct cttgtgccg ttgtacgtg tcaggtcaca ctggtgagtt	6420
aggcagggca cagatgcca gagcagagg aactttcctt ggggattcaa cacgtgcaag	6480

tcttaggggc	tggcaaatcc	tgccctcagc	tagagagggg	gcttttattt	gagaccagaa	6540
tcacctgagc	atcctcctgt	ccccagctgt	gtccagcctg	tctgcaggga	catcctgaga	6600
ggaccaggct	ctcccccat	ccacctgcct	aagtgccact	ctgaaccctg	tccacctgtg	6660
ccgtggaggg	gcgtgacctc	aagctgctca	gccagcagca	ggcttggccc	tggggggcag	6720
cagagacca	ggtggctgtg	gggtgggtgc	tctgtggcgt	ggttctgaaa	cttcgttga	6780
agtgtgtgga	cagtgccttg	cctgttctct	gtgggacct	atttagaaac	gaggtctgag	6840
ttactggggg	tcactactgt	gttctgatgg	cccagctgtg	tggaggccgc	ggtgcagccc	6900
catccaagga	gccaggggccc	tgggtctagc	cgtgaccaga	atgcatgccc	cggaggtgtt	6960
tctcatctcg	cacctgtgtt	gcctgggtgtg	tcaagtggtc	gtgaaactct	gtgttagctc	7020
ttgggtgttc	tgaaagtgcc	ccgggtctc	aggcctcaga	accagggttt	cccttcatct	7080
cggtggcctg	ggagcatctg	ggcagttgag	caaagagggc	gattcacttg	aaggatgtgt	7140
ctggccctgc	ctaggagccc	ccgggcacgg	tgctggggcc	tgaagctgcc	ctcgggtgtg	7200
ggagaggagg	gagcgatgaa	gtggcgctga	gctgggcagg	aagggtgagc	ccctgcaagg	7260
tgggcatgct	ggggacgctg	agcagcatgg	ccagcagctg	ggtctgcagc	ctggtacccg	7320
gcgggacttg	tggttggggc	tggtttgtgg	ccaggagagg	ggctggcagg	agacaagggg	7380
gactgtgagg	cagctcccac	ccagcagctg	aagcccaatg	gcctggctgt	gtggctctca	7440
gctgcgtgca	taacctctca	gtgcttcagt	tctctcattt	gtaaaatgag	gaaacaaaca	7500
gtgccagcct	cccagagggtg	tcattgaggat	gaacgagtga	ccatgtagca	tgggctgggt	7560
gcgtgtcacc	taacatcacc	agcctttgca	aggagagccc	tgggggcctg	gctgagtatt	7620
tcccttgccc	ggcccacccc	aggcctagac	ttgtgcctgc	tgcaggccct	tgacccctga	7680
ccccattgca	cctgtctcca	caggagccga	ggaggtgctg	ctgctggccc	ggcggacgga	7740
cctacggagg	atctcgctgg	acacgccgga	cttcaccgac	atcgtgctgc	aggtggacga	7800
catccggcac	gccattgcca	tcgactacga	cccgttagag	ggctatgtct	actggacaga	7860
tgacgagggtg	cgggccatcc	gcagggcgta	cctggacggg	tctggggcgc	agacgctggt	7920
caacaccgag	atcaacgacc	ccgatggcat	cgcggctgac	tgggtggccc	gaaacctcta	7980
ctggaccgac	acgggcacgg	accgcacgca	ggtgacgcgc	ctcaacggca	cctcccgcaa	8040
gactctgggtg	tcggaggacc	tggacgagcc	ccgagccatc	gcactgcacc	ccgtgatggg	8100
gtaagacggg	cgggggctgg	ggcctggagc	cagggccagg	ccaagcacag	gcgagagggga	8160
gattgacctg	gacctgtcat	tctgggacac	tgtcttgcac	cagaacccgg	aggagggcctt	8220

gttaaaacac cggcagctgg gccccacccc cagagcgggtg attcaggagc tccagggcgg	8280
ggctgaagac ttgggtttct aacaagcacc ccagtgggtcc ggtgctgctg ctgggtccat	8340
gcgtagaaag cctgnaaac tggagggagc cttttgtccc cctgncttca gtttccctcat	8400
ctgtagaatg gaacgggtcca tctgggtgat ttccaggatg acagtagtga cagtaagggc	8460
agcctctgtg aactgacca cagtacaggc caggcctctt tttttctttt tttttttgag	8520
atggagtctc actctgtcgc ccagggtgga gtgcagtggg gtgatctcag ctactacaa	8580
cctctgcctc ctgggtctaa gtgattctcc tgcctcagcc tctgagtag ctgggattac	8640
aggtgcctgc cactgtgctt ggctaagtgt tgtatttttg gtagagatgg ggtttcaccg	8700
tcttggccag gctgggtcga aactcctgac ctccaggatg ccacctgcct cagcctccca	8760
aagtgtctggg attacaggca tgagccacca cgcccggtca ggccaggcct cttttgaaca	8820
ctttgcacac catgggtctt ttcattccagg ggggtaggta cagttgtaca gttgaggaca	8880
ctgaagccca gagaggctca gggacttgcc cagggtcaca cagcaggatg tggcagggtg	8940
ggggctgggc ctggcagcgt ggctccagct ttccagcata gaaatctgtg aaagcagata	9000
gtttgtcggg cggtagggga gactttctga gaccgcgcc agcggctcag agggtagtag	9060
ccaggggcct tcctgggggc tcataaccca gaacactgaa tgggaaaacc ctgatggagg	9120
aggcgagtg gagctgtggg tgccgatggg aagtcccaga ggagctggga ggtcagtagc	9180
ggtgctgccc tctgtggagc acttagtggg caccagggtg gtttccagggt tcatggccct	9240
gggacctgaa gctcagaagg tgaagtaact tgcccagggc acccgctcggg cagcggcggg	9300
cagaggattt gtgggctgtg gagcctgtgc tcgtggcca gccctggggg ttgtgagtgt	9360
gctggccggg gagcttttcc tgcaagtgga ctgggtgtcta ggagccagca tgtcaggcag	9420
caggcagcgg gagtgcagca ggcagcggga gcacagcagg cagagggcgg ggctcagaca	9480
gccatccgtg gacctgggg caggaggca tgtgggagag ggctgctcca tggcagtggc	9540
tgaagggtct ggttgtgccc cgaggagggt ggatgagggt aagaagtggg gtccccaggg	9600
gcttttagcaa gaggaggccc aggaactggt tgccagctac agtgaaggga acacggccct	9660
gaggtcagga gcttgggtcaa gtcactgtct acatgggcct cgggtgtctc atctgtgaaa	9720
aaggaaggga tggggaagct gactccaagg cccctcctag ccctggtttc atgagtctga	9780
ggatcccagg gacatgggct tggcagtctg acctgtgagg tcgtgggggtc cagggagggg	9840
caccgagctg gaagcgggag gcagaggggc tggccggctg ggtcagacac agctgaagca	9900
gaggctgtga cttggggcct cagaaccttc acccctgagc tgccaccca ggatctgggt	9960

tccttccttg gggggcccca gggaacaagt cacctgtcct ttgcataggg gagcccttca	10020
gctatgtgca gaaggttctg ctctgcccct tcctccctct aggtgctcag ctctccagc	10080
ccactagtca gatgtgaggg tgccccagac cctgggcagg gtcatttctg tccactgacc	10140
tttgggatgg gagatgagct cttggcccct gagagtccaa gggctggtgt ggtgaaaccc	10200
gcacaggggtg gaagtgggca tcctgtccc aggggagccc ccagggaactc tggtcactgg	10260
gcttgccgct ggcattgtca gtctccagc acttactgac accagcatct actgacacca	10320
acatttacia acaccgacat tgaccgacac cgacatttac cgacactgac atttaccac	10380
actgtttacc aacactgaca tctactgaca ctggcatcta ccaacactga catttaccga	10440
cactgacatt taccaacact atttaccac actgacatct actgacattg gcactacca	10500
acaccaacat ttaccgacac caacatttac caacactgaa atttaccgac accgacattt	10560
accgacaccg ttaccaca cgcagttta ccgacaccga catttaccga cactgatatt	10620
taccaacact gacatctact gacgtggca tctactgaca ccgatgccag catctacca	10680
caccgacatt taccaacact gacatttacc aacactgaca ttaccgaca ttgacattta	10740
ctgacactga catctactga cactggcatc tactgacact gacgtttacc gacactagca	10800
tctactgaca ctgacattta ccaacaccag catctacca caccgacatt taccaacact	10860
gacatttact gacactgata tctactgaca ctggcatcta ctgacacca catttaccac	10920
caccagcatc taccaacacc gacatttacc aacaccagca ttaccaca ccgatgttta	10980
ccaacgccga cgtttaccga cgcagcatc taccaacact gacatttacc gacaccgaca	11040
tttaccgaca ctgacattta ctgacactga catctactga tactggcatc taccgacact	11100
gatatttacc aacgccagca tctactgaca ctgatgttta ccaacaccga catttaccag	11160
caccgacatt tactgacacc aatatttact gacatcaaca tttagccatg tgatgggggc	11220
cggcttgggg gcaggccttg ctcttggcac tggggatgct gcagagacca gacagactca	11280
tggggcatg gacttctgct tcttctccag cctcatgtac tggacagact ggggagagaa	11340
ccctaaaatc gagtgtgcca acttgatgg gcaggagcgg cgtgtgctgg tcaatgcctc	11400
cctcgggtgg cccaacggcc tggccctgga cctgcaggag gggagctct actggggaga	11460
cgccaagaca gacaagatcg aggtgaggct cctgtggaca tgtttgatcc aggaggccag	11520
gcccagccac cccctgcagc cagatgtacg tattggcgag gcaccgatgg gtgcctgtgc	11580
tctgctatct ggccacatgg aatgcttgag aaaatagtta caatactttc tgacaaaaac	11640
gccttgagag ggtagcgcta tacaacgtcc tgtggttacg taagatgtta tcattcgcc	11700

aggtgcctgt agacacagct acttggagac tgaggtggga ggatcgctgg agtccaagag	11760
tttgaggcca gcccgggcaa aggggacaca ggaatcctct gcaactgcttt tgccacttac	11820
tgtgagatTT aaattatttc acaatacaaa attaagacaa aaagttaatc acatatccac	11880
tgccctgctt aagacagaaa acatgggtgt tgttgaagcc agaggcagct gctggcctga	11940
gtttggtgat tggttcctaa gcagttgaag gcagttttgt tttccatag atgtctgttc	12000
tccctttgct ggggtgcagcc tcgccctgct gctgtggctg ggtttcagtg gcctcgcccc	12060
gtggacgcag cctcgccctg ccgctgtggt cgggtttcag tggcctcgtc ccgtggacgc	12120
agcctcgccc tgcgcgtgtg gtcgggtttc agtggcctcg tcccgaggac gcagcctcgc	12180
cctgcgcgtg tggtcgggtt tcagtggcct cgtcccgtgg acgcagcctc gcctgcgcgc	12240
tgtggtcggg tttcagtggc ctgcctctgt ggacgcagcc tcgccctgcc gctgtggctg	12300
ggtttcagtg gcctcgcccc atgggcgtgc tttggcagct tttgtctac ctgtggagcc	12360
tctcttgagc ttttttgttt gttgtttgtt tttgtttgat tttgtttgat tgtttgtttt	12420
tgttgctggt gttgttgccc aggctggagt gcagtggcgc gatctcagct cactgaaacc	12480
tctgcctcct tgggttcctg ccattctcct gcctcagcct cccacatagc tgggattaca	12540
agtccccgcc accacgcctg gctaaatTTT gtatttttag tagacagggg gtttcacat	12600
gttggtcagg ctggtctgga actcctggtc tcacatgatc cacctgcctc ggctcccaa	12660
agtgttggga ttacaggcgt gagccaccgc gccagccct ctgttgagca tattttgagg	12720
ttctcttggg gccagtgata tgtacatgtg tccccatcgc accatcgtca cccattgagg	12780
tgacattggt gcctctcctc ggggtggatg cctccctctg tttccagcaa cttctgaagg	12840
atTTTctga gctgcctcag tcttgttga cgtcaccatc ggggtcacct ttgctctcct	12900
cagggctccc aggggaggcc cgaatcaggc agcttgagg gcagggcagg atggagaaca	12960
cgagtgtgtg tctgtgttgc aggatttcag accctgcttc tgagcgggag gagtttcagc	13020
accttcaggg tggggaacct agggatgggg gaggtgagt ggacgccctt cccacgaaaa	13080
ccctaggagc tgcaggtgtg gccatttctt gctggagctc cttgtaaatg ttttgttttt	13140
ggcaaggccc atgtttgcgg gccgctgagg atgatttgcc ttcacgcctc cccgtacccc	13200
gtgggagcag gtcagggact cgcgtgtctg tggcacacca ggctgtgac aggcgttggt	13260
ccatgtactg tctcagcagt ggttttcttg agacagggtc tcgctcgctc acccaggcga	13320
gagtgcagtg gcgcaatcac ggctcgctgt agcctcaatc tccctgggct caggtgatcc	13380
tctgcctca ccctctgagt agctgggact acagacacat accaccacac ccagctagtt	13440

tttgtgtatt ttttgtgggg ggagatgggg tttcgtgtg gtgccaagc tgatctcaaa	13500
ctcctgaggc acaagcgatc cacctgcctc ggctcccaa agtgctggga tgacagggcat	13560
cagccgtcac acgcagctca atgattttat tgtggtaaaa taaacatagc acaaaattga	13620
tgattttaac cattttaaag tgaacagttc aggctgggag tggaggctta tgcttgtaat	13680
cccagtactt tgagaggctg aggtgggcag atcacctgag gtcaggagtt tgagaccagc	13740
ctggccaaca tgatgaaatc cagtctctac taaaaataca aaaattagcc gggcatgggtg	13800
gcagggtgct gtaatcccag ctactcggga ggctgaggca ggagaatcgc ttgagcccgg	13860
gagggtggagg ttgcagtgat ctgagatcat gccactgcac tccaatctgt gtgacagagc	13920
aagactctgt cttgaaaaat aaataaataa aaaaaatttt aaaaagtga caattcaggg	13980
catttagtat gaggacaatg tgggtgcagg atctctgcta ctatctactt ctagaacact	14040
ttcttctgcc ctgaaggaaa ccccatgccc accggcactc acgcccattc tccccctct	14100
cccagcctct gtcaaccact aatctacttt ctgtctctgg gggttcactt cttctggacg	14160
tttgtgtga ctggaatcct gcaatatgtg gtccctgcgt gtggcttctt tccatagcat	14220
tgtgttttcc agattcacc acacattgtc gcacgttatc agaattctcat tctgactgg	14280
gtgcagtggg ttaggcctgt aatcctaaca ttctgggagg ccaaggcggg acgatcactt	14340
gaggcaggag tttgagacca gcctggccag cctagcaaga cccagctac caaaaaattt	14400
taaaagttaa ctgaacgtgg tgggtggggg cacttgtggg tcccagctac ctgggaggct	14460
gaggttggag gatcgcttaa gccagaggag tcaaggctgc agtgagctat gatcgacca	14520
ctgcactcca gcctggacaa cagagcaaga cctgtctga aaaaaaaaaa aaaaaaaaaa	14580
gttcccttct ttttgtggct ggatgacatc ccattgtatg gccacagcac attttgtttg	14640
tctgtttatc ggggtggggg cagtggtttc caccttttgt ctctgtgaa taatgctgct	14700
gtgaacattt gaattcaagt ttttgtttga acacctgttg tgaattattt ggatatatgt	14760
gtaggggtag gattgctgag tctatggta atgttaggtt tgacttactg aggaaccatt	14820
aaactgtttt caacagtggc tgcgccgttc tgcacccca ccggcagtgt gtgagggttc	14880
tgactttacc tctcacaaa cgcttctttt ccatttaaaa aaatattcag ccagggtgctc	14940
tggctcacgc ctgtaatccc agcactttgg gaggccgtgg cgggcggatc acctgaggtc	15000
aggagttcga gacgagcctg gccaacatgg tgtaaccca tctctaccaa aaatataaaa	15060
attagccggg tgtggcagcg ggcgcctgta atcccagcta cttgggaggc tgaggcagga	15120
gaatcacttg aaccggggag gcagaggttg cagtgagcca agatcgcgcc actacactcc	15180

agcctgggtg acaagagtga aactccatct aaaataaaac aaaaataaaa ataaataaaa	15240
atttattaaa acattcatca cagccagcct agtgggtgtc ccatgtggct ttgcctcgca	15300
tttcctgat aactaggatg ctgagcgtct tgtcccaggc ttgccacacc tcagcacttt	15360
gagatacgtc gcacagtcct catttgcgaa cgagaaatga ggtttaggga acagcagctg	15420
tgtcatgtca cacagcgagc aggggggtctc tgagccgtct gacccacag ccgaccaagc	15480
tccaatcctt accgcctcct agtggtgtgg atgtagccca gggtgctccc acatttttca	15540
gatgagaaca ccgaagctca aaacaggagc gttttgtcca cattggatac acgatgtctg	15600
tgggttggtc ctgaagtcac tttatatctc agtgggtccag actggagtag gacaggggggt	15660
tctggggaat ggggaaggtg tctcaggtga aaggaaggaa ttccagattc tccatactgt	15720
ccttggggaag ttagaagact cagaggggtct ggcaaagtca gacaaagcaa gagaaatgca	15780
gtcaggagga agcggagctg tccaggaaca ggggggtcgc aggagctcac ccccaggaac	15840
tacacttgct ggggccttcg tgtcacaatg acgtgagcac tgcgtgttga ttaccactt	15900
tttttttttt tttgaggtgg agtctcgctc tcttgcccag tctggagtgc agtggcacga	15960
tctcggtcct ctgcaagctc tgcctcccgg gttcatgcca ttctcctgcc tcagcctccc	16020
gcgtagctgg gactacaggc gcctgccacc gcgcccggct aatttttgta tttttagtag	16080
agatgggatt tcactacatt agccaggatg gtctcgatct cctgacctca tgatccgccc	16140
gtctcggcct cccaaagtgc tgggattaca ggcgtgagcc accgcgcccg gcccgatttc	16200
ccactttaag aatctgtctg tacatcctca aagccctata cacagtgtctg ggttgctata	16260
gggaatatga ggcttacagg ccatgggtgt ggacacacag aaggggacgga ggtcaggagg	16320
tagaagggcg gagagagggga acaggcggag gtcacatcct tggctttcaa aatggggcag	16380
ggagagacac cctctgagca tggtaggaca ggaaagcaag attggaacac attgagagca	16440
accgaggtgg ctgggcgtgg tggcttacgc ctgtaatccc aacactttgg aaagctgagg	16500
tgggtggatt gcttgaggcc aggagttcaa gaccagcctg gccaacatgg tgagaccccg	16560
tctctactaa atatacaaaa attagccagg cgtgatgggtg catacctgta atcccagctg	16620
cttgggaggc tgaggcagga gaattgctta aacctgggag gcggaggttg cagtgagccg	16680
agatcccgcc actgcactcc agcctgggcc acagagttag actccatctc aaaaaaaaaa	16740
aaaaaaaaaga taaaaagacc aaccgaggaa ttgaagtggg ggggcgtcac agtagcagaa	16800
gggggatcgt ggagcaggcc accctgtggt catgcactgg aagctcatta cctgacgatt	16860
tggagctcat cactgggggc ctaaggagaa tagatactga aggatgagga gtgatggcgc	16920

ggggcacggg tgtctttggt ggccagaact tggggactgc tggggtgcct cactgcaggc	16980
cttctcagcg ccccttatat gcttacacag gctgtttcta agagggggat acattgcata	17040
agcgttttca gactacctca tcatgggtcc ctttctttac cctctgtggc cctgggtggcg	17100
cactctctgg gaaggtgcag gtggatgcc agaccgcc tgccatccac ctgcacgtcc	17160
agagctgact tagcctcgag attgctgctg gcacctctg ccccgggaca cctcggatgt	17220
gcccgtggag atgctggctc tgtgttttct gctggagttt ggtgctctt ttctctctgc	17280
aagtggccac cgctcttggg tatgtctca ggcttctgcg agtcatggct gcttctcagg	17340
tccttgccca gcgccaggag caaacctcc tggcactttg ttcaggggtg gatgcgccag	17400
tgttctctgct gtggaccgcc atctcacatg aggtcttgg gcctgcaggc tcgttcagga	17460
aacacccgct gagtatgcag tgtgtgccag ctgtgtccca ggcaatggcg gggacagtgg	17520
ctgctgctgg ggttgtggtg gcttctgggg actctgggga cagctgaggt gcaaggagcc	17580
acggctcctt gaggatgcag ttggactcca ggtggaaggg atggttgggg gaggtataaa	17640
tggggtcagg gaggagacac atttgaaca atgggaacat ttttaagatg ctatgtcggg	17700
aggcaacaag gtggccaacc caggtgctga ggagcccaca ccagccctgg acgtgttttg	17760
ccgctcacct ttgctgggga gtggtgggag agaggattcc gttccacgtg gtggtgtgcg	17820
cagctgggct gtgtggagct gggcgctagg aggaaggtgc tttctgcggg gctagccggg	17880
ctctgccttt gaacacaatc aggctccagg ttttcagcat ccagtgcatt agaggacttc	17940
acgggcagct gtggctgac ccttgatgaa ttgggagaag aacaaaggtc tatgaaatga	18000
ggtttcatgt agatggcatt agagacgccc acaacagatt tacagagtgg agcggagacg	18060
gcggatgggt ctgggaggcc cctcctgctg gccttgactg tgacagctgt cctgggaatc	18120
agcttccagg ccgccccagc agcctgactg acacacacag gggtttttagc cccatcctgc	18180
gaccagctgt tgccatcatc agtgacagct gggagtggcg gtggttccag cctggggcac	18240
cctccccacc tgctggggcc caccagggc agtcctgaca cctacagggt gcttggagcc	18300
gcacccaggt cctgccccac cacgtgtgaa gcccgagtgg tcgtgggctg aggtccctg	18360
attgcacccc cacttccctt ctgcttcaca tagctgcctc ttctcacctg ttttccagcc	18420
tcctgggcta ggaattccag tggtgtgctg gctttgcccc aggacacctc cttagccctc	18480
ttcctgagtc tagagccccg ggggttgga gtcctggccc ctgggacacc tgcagccaca	18540
ctcagcttct cctgtgagcc tccagcatgt cccctcagga ccaagccctc acgttcttgc	18600
ctccccgcc acctgggctc agccagggga aggcctggct gggagcgtct cccctctgcc	18660

ctgcccttct cccctcctac cctgcccttc tctcctctgc cccgccatgg cttttatata	18720
ctgtgccaca agacatggct gtgtgtgaaa gtggcagggc ctggcatctc tgtgggtctc	18780
tgaggcccac gctccagtgc cactcttccc acccgctggc cgtgccctca tgctggaggg	18840
acagcccagc cctctcccga accccagccc catgtgcccc gctgcccccg gccctctccc	18900
ctggaagccg gggtcactcc agccgtatgc catgggtggg acatcctgct tccttggcct	18960
tccaggggaag gtccctcttc caaatggcga cacctggctc ctgcctggag gctggaagct	19020
gtggcccttg tatgcccctc cagggctctgt gcgctcggtt ggcccagatt cccatcacgc	19080
tcacatcac catcatcatt gtcatttcgc ttgtctgtga gccggcctgg tctcccagag	19140
cagagaccct ctgaggcca gccctgagtg gggctctcgt gctgaccct gacggggact	19200
caggacgtac caggctcggg tcaggagtga ccccaaac tcgtgccctt tgacaggcac	19260
ccctgacttt tgctaagtgg gtggaggtga catcacttac agcgggagtg atgggacagg	19320
gtctgttggc tgcactgtgc tcccagggat ctggggagag gctatatccc tgggctttgg	19380
cactgcagag ctgtgtgtgt ttgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt	19440
gtgtgtgttt gcgtgcgcgc acatgtgtat aagatctttt tttattacat gaagcaagat	19500
aactgttgct gtttcctttt gggttttgtg ttcaacagag tggggtactt cttccctcag	19560
acaacagaac tctccccctt aaacacgtgc tgtcagaggg tgggtcttgg gctcatgtct	19620
gtttgcacag ccgagtcaga ggaaacacag ggttcttcat aaaaactg cacagcaggc	19680
gactgtccag agtcagcctg caggacggca gcagccctgc cctcagagc acagctaggg	19740
tgggctgctt tgggatctcc cgtcattccc tcccagctgg cagccggcgg ccggcccatt	19800
ccttggtgtg ctggtcaggg gggcgtgcgc ctgctctgct caccctggga atgggacaga	19860
agctggcagc tcggagagga cagggtcggg cccttgggtg gcctctggct ggaccatctc	19920
attgtcctca gacacagcct ctgggtctta gtttcatttc ctgaaaaaca agtgcacaga	19980
actagagcag gagtcagag ctacggcccc cgggccagat ccagccctgc cacctgtttt	20040
cacaccatgc tcaagctgag tgggttttac attttttaat tacttgaaaa aaaaaaagcc	20100
aaaggagggt tcatgacca tgaaaattat atggaattca aaaaaaaaa attatatgga	20160
attcaaattt cagtgtccat aaataatttc ttgagacagg gtctcgctct gtcaccagg	20220
ctggagtgca gtgctatggc atggctcgt gtacccttga cctcccaggc tcaagcgatc	20280
ctcctgtctc agcctcctga gtagctggga ctacgggtgt gtgccaccaa gcccggttaa	20340
ttttttttta attttagtaa agacagggctc tttctatgtt gccaggtt ttctggaact	20400

ccatcttggc ctcccaaagt gctgggatta caggctcgag ccacggagcc cagcctgttt	20460
ttgttttttc actgataaag ttttgccggg tgtggtagtg tgtgcctcta gcgatttggg	20520
aggctgaggt gggaggatcg cttaaagccca ggagtttgag gctgggctca agtgatcagg	20580
agggtgaacta tgatcatgtc attgcattcc agcctgggtg acagagcaag aacctatctc	20640
ttaaaaaatat atatttaaaa agtattgggt gtgggtggctc acgcctgtgg tcccagctac	20700
ttaggcatct gaggtgggag gatggcttga gcccaggagt ttgaggttgc agcgagccaa	20760
gatcgtgtca ctacactcta gcctgggtga cagagcccag accctgcctc tttaaaaaaa	20820
aaaacaaaaa aacatgtatt ggaacacagc catgcctgtt cagtcacgtg ctctccatgc	20880
tgttttctgc tccagagacc cttatggcct gaaagctgaa aatattttct atcctttaca	20940
aaaaagtttg ctgacctctg tcctggaaaa ttcattctcc aagttctctt ccggcactgg	21000
cgttcctggg tgtcctaaat ttggcccttg ttatttctga actctgtttt ggctctgttc	21060
cctcccagga gccaggacag gcacgttctc tgcattctgt cccctgacgc ccagaggctt	21120
ggctcggtc aggcattctt ggaaatatct ggctccagga aaggcagagg cctcctgagt	21180
cggcccagag ggaacctgcc ccaggtctgg gggaggcctg acccagcaga gtggcttttg	21240
ccgatgggtt gggccggtca agatgtgctg aaagtgtgcc tcagaaggcc actttgggat	21300
tccttcctcc agtattagag caactgagag ctgctcattg caagcctgat gttttcccag	21360
ttggccgggt ccaccgggtg ccctgggatt ctgggatctg ggtggaaaagt agggggcttg	21420
ggggagtgtc ctgggttctg gaatccaggt ggcaagtggg gaggttcagg gagtggcttc	21480
tgagccacca taggggtctc tgtgggaggc tctgcccata caggagattc cgcaggccct	21540
gccggcccag agccagcgtc ttgcgcttgc cgaggctaca gccagcccca gccgggtgga	21600
acagcccgtc gcctcctctc actttgtttt ggggccacct gggagtgtgg agcaagggtg	21660
gagagggagg aagtggctgc cggccgctgc ccagcacctc tgtttgcctt gggccctctg	21720
tgggctcctt tttattgtc ttcaatgaag ccagggaat ggacttcctt gcctcacttc	21780
agttcaacat gtctggaagt ttggtattaa aattaagaaa gtgtggaaat agagcaagaa	21840
gagaaaaatc tctccaagag ataatagtga cctctgagct gggcgcggtg gctcacgcct	21900
gtaaatccca gtactttggg aggctgaggc gggcagatca cctgaggtcg ggagtttg	21960
accggcctga ccaagatgga gaaaccccggt ctctactaaa aataaataaa taaataaata	22020
aataaataca aaattagcca ggcattgggtg cgctgccta taatcccagc taaggcagga	22080
gaatcgcttg aacctgggag gcaaagggtg cagtgaacca agatcacgcc attgcactct	22140

agtctgggca acaagagtga aactccgtct caaaaaaat aaataaataa aaaataaaaa 22200
 tagtgacctc tggccaggtg tggcagctca taccgtaat cccagcactt tggaaggaag 22260
 gccgagatgg gcagattgct ttagcacagg agtttgagac cagcctggcc aacatggtgg 22320
 aaccccatct ctacaaaaat agaataaaat ttaagaggta atagtgcact tttggtagat 22380
 cgaaacctgg attgctttct ttttctaaat gctgattctt ttctttgtgg tgtttgtgtt 22440
 ctgtgcogat gtccctcccc cagccctggt attgtgagtg gaagaagggg aaaggggtcg 22500
 cccgctactg tgagccctc ctctcacgct ggggtgctct ggagaagcct gcacttcttc 22560
 attgtacgcc agggctgggt cccctccctgg agtggttctg tgctgctggg atggggccaa 22620
 cccctcagat gttttctgag tgtcacacac aggtgtgtgc attcatggcc tttgctgtc 22680
 ttctgttgtt ggaggcaaaa atgtgaagaa ccctagatga ttttgggacc agggctccat 22740
 cacctgctgt tcattgcaca ccggagcacc caggcatggg tggagagctc agacttccag 22800
 gcacggctgc aggggctggt ctaacctagt tcccgcgcgc ctgctcgtca gaaccgcctg 22860
 ttgggagctg ttatcatgat accatacctg ggccctgggc tatccgattc tgacttaatt 22920
 gctccaggtt ggggccaggc cgttgtttgc tgttttgttg tttcttctgt gacgttagcc 22980
 actgggctaa tctgagcccc tcagttacag gtggagaaac tgagacccat gggggtgcaa 23040
 ggacttgccg aggaccaga gcccttggg ggcagagctg aggcggggcc tggctttggg 23100
 tcccagagct tccagtcctc tcccgcctc cctaacagct ttttttttg agacaagatc 23160
 tcacctgtc acccaggctg gagtgcaatg gcatgatctc ggctcactgc aatcttcgct 23220
 agctgcgttc cagcgattct cctgcctcag cctcccgagc agctgggatt acagggtgtg 23280
 gccgccatgc ccagctcgtt tttttttgta ctttttagtag agatagggtt tcacctgtt 23340
 ggccaggctg atctcgaact cctgacctca aatgatccgc ctgcctcggc ctcccaaagt 23400
 gctaggatta caggctggga tcacactgtg cctggcccta gcagctttgt cctgtgccat 23460
 ccaacaacag atgaccgaag tctttgtttc ttaacatgca ttccatctgc cttacagttt 23520
 tgccacctgc aaaacagagg acttgctcgt tttctggtaa gctggaaatg taatctggta 23580
 gcaggaggcc tgtggaagct tgcctttaat ggccttgtgt ctctttcatc ctgtcctgag 23640
 agccggagaa cttggatgtt gcacctaaact caaccttctt gttaacatac agttctgcag 23700
 gctcatggat catcagaacc acgtcctatc tcacgcggct gtatgcttcc gttggttcag 23760
 gtgtttttac cttgacagta ttttctctc ggtggctttt gcggtgggtg cttttaatca 23820
 gcattgactc ttcaagaaaa atatttagct gctacatctc agaggagaca gggtggaag 23880

catctgagac ctgcaggctc agacttagaa ccagaagtgc cctcagagtt catccggccc	23940
tgacccagcg ggaaatgagt tcacagagaa gcgggagaaac ttgccccag gccctgccgt	24000
tgctcataac tgccccaggt ccttacattt gctccaggtc ctgccccagg cctgcagtt	24060
gctcataact gccccaggtc cttatatttg ctccagggtc tgccccaggt cctgcagttg	24120
ctctgtgtgg tgggtgtgat ctggagccct ccgcccattg ctgcacctgg ggcaggcatt	24180
gctaattgat ccaggactc cttcctgcgg agcacgcctt ggttctccag gcagccgctg	24240
cctgtcagcc tgcaagtgtt cgggagagga cacctgcttg cctgggtctgt tccaaatctt	24300
gcttctcatc ccagcacagg taggggggtgc tatgggaaag ggatcctcag ttggccctgt	24360
cactgctcta tcagctgggg acgtggcatc ctagtgaaaa catcatggcc gggcgcggtg	24420
gctcacgcct ggaatcccag cactttggga ggctgaggag ggtggatcac ttgaggtcag	24480
aagttcgaga ccagcctggg caacatgggtg aaacccatct ctactaaaaa tacaaaaatt	24540
cgccagggtg ggtggcgggt acctgtaatc cgagctactc gggaggctga ggcaggagaa	24600
tcgcttgaaac ctgggagggtg gagcttgcat tgagccgaga tcttgccact gcactccagc	24660
ctgggcaaca gagtgaagcg ctgtctcaaa atctcaaaca aacaaacaaa caaaaaacaa	24720
acaaacaaaag cgtcatttat ccagcacccc tggggaacca tgctacctgg tgttttatgg	24780
tacctggcaa ggtgcagggtg aagttgctgc tcttgggcat tgaaccctgc ttgtttgggg	24840
cagctcaggc ccagggcagg gtccgggttg gctctcgttg gtgtggccct ggcccatcca	24900
gacctatatt tctgccgtcc tgcagggtgat caatgttgat gggacgaaga ggcggaccct	24960
cctggaggac aagctcccgc acattttcgg gttcacgctg ctgggggact tcatctactg	25020
gactgactgg cagcgccgca gcatcgagcg ggtgcacaag gtcaaggcca gccgggacgt	25080
catcattgac cagctgcccg acctgatggg gctcaaagct gtgaatgtgg ccaaggctgt	25140
cggtgagtcc ggggggtccc aagccatggc tcagccatgc agacttgcac gaggaggaag	25200
tgacgggtcc atgcctgggc ataagtgttg agctcagggtg ccccgacctg gggaaaggca	25260
ggacaggaaa ggtgacagta tctggccaag gacagatggg aagggaccaa gggagctgat	25320
tagggagtgg ttatggacta ggaatgtcgg taacaatggg tagaaaagtga ctaacatttg	25380
ttgagcacct gctgtgtgcc cggccctggc cgggagcctt cgtgccca gtagccccgt	25440
ctgcaaattgt agttccttgc cctactcgca ctggggagca ggacgcagag ccgtgcaact	25500
cacagggtgcc aagctcagga ctccctcctg ggtctgcctg ggctgggctg tgcttgttgc	25560
ccctgtggcc cacgcatgtg caccttcac ctgaaagcca ggatcttcag gacgtcccc	25620

gaggaggtcg ttgtctggca caatgatttg tctcttctcg aaaaggtgac agagttacac	25680
tggagagagc agcatccagg tgcggcaggg acaggcctgg ggctcgcggg cagggactct	25740
gtgtcttgcc ggggtccac actgcacctg cttgtcagag gcactcagtc aatctttgct	25800
gatgaaggat gagaggacag aggacgtgat gcttgctgct gcattgcctg cagtctggg	25860
tgagatgccc gggttgactc tgctgcccgt cgggtggatg tgatgtcaga tccccggctt	25920
taaaatacga gggagctggg aattgagggg gcaggttggg gcagaaagca cagccccgtg	25980
gaagcctgga gctgaggcag tgtgggcgac ccctggagca gtgagtgctt ccttcatggc	26040
cttcatcgca ccctgcagtc ctcatgtagg ggatgccatc catgaattta gttttccag	26100
cctcctttaa aaacgcgttc atgctggggc cggggcagtg cagtggctca catctgaaat	26160
cccaccactt tgggaggccg aggcgggtgg atcatgaggt caggagatcg agaccatcct	26220
ggctaacaag gtgaaacccc gtctctacta aaaatacaaa aaattagccg ggtgcggtgg	26280
cgggcgctg tagtcccagc tactcgggag gctgaggcag gagaatggcg tgaaccggg	26340
aagcggagct tgcagtgagc cgagattgcg ccactgcagt ccgcagtccg gcctgggcga	26400
cagagcgaga ctccgtctca aaaaaaaaaa aaaaagtaca aaaaaaaaaa aattagtctg	26460
ggtgtggtat cacgcgcta taatctcact actcgagagg ctgaggcgga gaattgcttg	26520
aaccaggag gtagaggttg tagtgagccc gtatcgtacc actgccctcc acctgggcaa	26580
tagagcgaga ctctgtctca aaaagaaaaa aaaaaaaga acatttatgc caggtgtggt	26640
ggctcatgcc tgaaatccca gaactttgga agactgaggc aggaggatca cttgagccca	26700
gaaatttgag agtgtcttcc ctgggcaaca tagagagacc tcattcttac cagaaaaaa	26760
aaaattagcc cggcatgggtg gcatatccct gtggtcccag ctacttaggg ggctgacgtg	26820
gcaggatcac ctgagtctgg aggcagaggt tgaagtgagc tgagatcatg ccactgcact	26880
ccagcctggg tgacagacag agaccctgtc tcaaaaaaaaa aaaaaaaaaa aagcatttac	26940
tatccaccat ggaaggtgag actgacctgt gagtgattgt tcaaagaaca aaaaataaac	27000
cccagagata agacaaaagg gtgcctccat ggggggtgtga tttaaagctg agaaattggg	27060
cttcttcccc ctccccctc accccgtggg ttgctaaagg agatgggaaa aaggattctt	27120
tttttggtg aaatatttaa cactaaatta aagccaattt taacagcact ttggttgatg	27180
agtgaatta acagactggc caaaaataaa cgaacggtct gtactatgtg aaaaagaggc	27240
agctttggcc atgctgggccc aatgtgagtt ttcagggttg ctgggaatgt ctgtgaatcg	27300
gaggaagggc ctagctggga ctctcaggag ccaaggccct gaggggcaac ttgcctggtc	27360

cctgccctga	ggcgttcaact	gctttcttcc	tgggccagat	cacaggcccg	gaggctggac	27420
cactgggctg	gcactcttgc	cgagctgctc	cctgacttcc	tgaccatgct	cctttcagca	27480
gccttgctgc	actttagttt	ccttgaatga	aaaatgggga	tgagaatagc	tcctacctcc	27540
aaggtgaatg	gagtgaagtc	ggacaggtga	ctccctggga	ccagtgcctg	gcgcctgaca	27600
aggccagtc	agagcccgca	ctgctgttac	tgataccctt	ggctgtacca	ggggagaact	27660
tggttgccat	tgccagggtg	tctcccacca	ccccactac	tgtccctggt	tgatgtgtgg	27720
cggaataaaa	gctgtgcaca	ttggagcttt	tggcacatcc	tggctttcag	gtgaaagggtg	27780
cgtgtgtgtt	tgagggttta	gcctggccaa	cccagccatg	aggctcgacc	tgacctgggg	27840
gtgagtctctg	agctcggcac	ccctgagctg	tgtggctcac	ggcagcattc	attgtgtggc	27900
ttgggcccga	cccccttccc	tgctgggctg	ttgatgttta	gactggagcc	tctgtgttcg	27960
cttccaggaa	ccaacccgtg	tgcggacagg	aacggggggg	gcagccacct	gtgcttctgc	28020
acaccccacg	caacccgggtg	tggetgcccc	atcggcctgg	agctgctgag	tgacatgaag	28080
acctgcatcg	tgccctgaggc	cttcttgggc	ttcaccagca	gagccgccat	ccacaggatc	28140
tcctctgaga	ccaataacaa	cgacgtggcc	atcccgctca	cgggcgtcaa	ggaggcctca	28200
gccttggaact	ttgatgtgtc	caacaaccac	atctactgga	cagacgtcag	cctgaaggta	28260
gcgtggggcca	gaacgtgcac	acaggcagcc	tttatgggaa	aaccttgcc	ctgttctctgc	28320
ctcaaagggt	tcagacactt	ttcttaaagc	actatcgat	ttattgtaac	gcagttcaag	28380
ctaatcaaat	atgagcaagc	ctatttaaaa	aaaaaaaaaga	tgattataat	gagcaagtcc	28440
ggtagacaca	cataagggt	tttgtgaaat	gcttgtgtga	atgtgaaata	tttgttgtcc	28500
gttgagcttg	acttcagaca	ccccaccac	tccttgtctg	gtgcccgttt	gctcagcaga	28560
ctctttcttc	atttatagt	caaagtataa	catccaggac	aaatacagga	agactttttt	28620
tttttttttt	tgagacagag	tcttactctg	ttgccaggc	tggagtaccg	tagcgtgagc	28680
tcagctcact	gcaacctccg	cctcccaggt	tcaagcgatt	cttctgcctc	agcctcctga	28740
gtagctggga	ctacagacat	gcaccaccac	accagctaa	ttttttttat	atttttagta	28800
gagacagggt	ttcatcatgt	tggccaggct	ggtcttgaac	tcctgacctc	aggggaacag	28860
acgggggttg	cctcccaaag	ggcggaaata	acaggggtga	gccaccgttc	ccggcctagg	28920
aaaacttttt	gccttctaaa	gaagagttta	gcaaactagt	ctgtgggctg	gccttctgat	28980
tctgtaaaga	aagtttgatt	ggtggctggg	tgcggtggct	cacacctgta	atcccagcac	29040
tttgggaggc	cgagggtggc	agatcacctg	aggctgggag	ttcgagacca	gcctcaccaa	29100

cgtggagaaa ccccgctctct actaaaaata caaaaaaaaaa attaacccggg catggcgggcg 29160
 cctgcctgta atcgagcta ctcaggaggc tgaagcagga gaattgcttg aacctgggag 29220
 gcggagggttg tggtagctg agatggcacc attgcactcc agcctgggca acaaaagtga 29280
 aactccgtct cagaaaaaaaa aaagtttgat tgggtgaacc aaagcgcatt tgtttatgga 29340
 ttgtctgtgg cagcttttgt tctgccgaga tgagttgtga cagatctgta tgggctctaa 29400
 agcctaaaac atgtgccatc cgccccctta cagaaaaagt gtgctgacct ctgttctaaa 29460
 gtattggaca actacaatgt ttgtcattt attattctat gatttgtttt ctgctttttg 29520
 ttgttggtgt tgttggtgag ataggggttc cctctgtcac tcaggctgga gtgcagtgg 29580
 gtaatttcag ctcactgcag cctcgacctc ctgggctcta gtgatcctct catctcagcc 29640
 tcctagtag ctgggactac aggcacacac caccactcct ggctgatttt tttttttttt 29700
 tttttttttt gtggagacag ggtttccgca tgttgcccag gctggtttca aactcctagg 29760
 ctcaaacacc cacctcagcc tcccaaagtg ctgggattac aggcgtgagc caccatgccc 29820
 agcctattct actgtttgta ttacatagct ttaaaagatt ttttatgact ttaagtcaca 29880
 agggttcttt gtagaaaaa atatatatat aggaaagtat aaaaagaaag taaaaattgt 29940
 ccataacctc tccagccaga gacgaccgtt gctgacacct cagcatattg cctttaagtc 30000
 ttttttctct aagatagcat ttctcttcat cacagtcata tgctacgcag aattctgtat 30060
 cctgattttt tcaattgaca ttacaacagg tatttgatgg cgctgtgaca aactctttgg 30120
 cacaatcttt taaatgtatg aaatactcca ctgcacagat gtttgctttt aggcttaact 30180
 gttcttttat tttgcgtgtg ctgggttacag cggggcacag tggctcatgc ctgtaatcac 30240
 aacactttga gaggtgagg caggaggatc acttgagccc agaagtttga gaccggcctg 30300
 ggcaacatag tgagacccca tctctacaaa aaactttttt aataagtcgg gcgtagtgg 30360
 gcatagctgt agtcccagcc accaaggagg ctgagttggg aggattgctt gagccccagg 30420
 aggttgatgc tgcagtgacc tgagattact cactgtact ccaacctgag cgacagagca 30480
 agacttgtct ggggaaaaaa aaaaaaaaaa tatatatata tatatatata tatatacata 30540
 tatacatata cgcacacaca cataatataa aaatatatat ttataaatat ataatatata 30600
 atataaaaat atatatttat aaataaaatt tataaattat atttataagt aaatatataa 30660
 tatataatat aaaaatatat attatataat atataataaa atatataata taaaaatata 30720
 tatttataaa taatatataa tacatactta taagtatata tttaaaatat atgtaatgta 30780
 ttttttttaa tgtatgatat ataatatata ttataaata cacatttata ttattttata 30840

taaaatatat ataaaatctc caagttgctt tttccaaaaa ggtgtcttgc tgcatttcaa	30900
acattcattt aaaaacttga atgctggtga tctggtccag aatgtgttca gtagctgctg	30960
ccagtggcca agcatctcgg gagatgtcta caaaacacgc tggttctggc ctggcgtggt	31020
ggctcacgcc tgtaatctca gcactttggg aggctgaggc aggtggatca actgaggtct	31080
ggatttcgag accagccttg ccagcttggt gaaaccccat ctctactaat aatacaaaaa	31140
aattagccag gcgtggtggc atgtgcctgt aatcccacct acttgggagg ctaaggctgg	31200
agaatcgctt gaaccagggtt ggcagaggtt gcagtgaacc gagatcgcac cattgcactc	31260
caggctgggc aagaagagcg aaactccgtc tcaaaaaaaaa aaaaaaagat gctggttcct	31320
aaaatgtggc ccttttctc ctcacctgt gccagaccat cagccgcgcc ttcattgaacg	31380
ggagctcggt ggagcacgtg gtggagtttg gccttgacta ccccgagggc atggccgttg	31440
actggatggg caagaacctc tactgggccc acactgggac caacagaatc gaagtggcgc	31500
ggctggacgg gcagttccgg caagtccctg tgtggaggga cttggacaac ccgaggtcgc	31560
tggccctgga tcccaccaag gggtaagtgt ttgcctgtcc cgtgcgtcct tgtgttcacc	31620
tcgatgaga cagtgcgggg gtgccaaactg ggcaagggtg caggctgtcc gtgtggccct	31680
cagtgattag agctgtactg atgtcattag ccttgatggt ggccaggact ggtagggccc	31740
tcagaggtca tggagttcct tcgtggagcg ggtgctgagg ctgtatcagg cacagtgctg	31800
gctgctttca cctgggcccgt ctcaccgaag tgtccatgga gcctgcgtag ggtgggtatc	31860
tgtgtcgatt ttacagatgc agaaacaggc tcagagaaac cgagtgactt ccctaaggtc	31920
acatacccag ttagagcaga gctgggcccag gaagtgtgtg ctcaggctcc tgaccaggtc	31980
tccttgcttt gcactcttgc caaaaccatg atccagaact gactttgagg tccccggacc	32040
tcaggctcct ccgaaatggc ctcttgagg ctgctgagcc acagcttagg acccacctcg	32100
agaggcaaat gtgctttgag ctgccaggcg tcctgggggc cctgccttg gcacgggggt	32160
cagacaggcc ccagatgtgt ggggcgtcct tctggacttg agttttcttt tctgtgtggt	32220
ggacacagtg ctcacccctt aaagcacctg tgatgtgtgc agcagcccaa tccctgcctg	32280
tcgcctgttc tgctagggaa ggaaggaata cttcaggatg gcaggacaac agaaagaggt	32340
ccaggtttta gagcaagggc aggtcaaact tagaaaattc tggaatgagg atgtgcattt	32400
cctcttctgg atctgctaaa agaagaggga aggaggggct gctgggggag gagcccagag	32460
ccgagtttac atccgatcc cgcaaggcct cccctgccct gaggtcttgt tttgtgatgt	32520
gcttgtgtcc atcctgggtt ctgccgtgtc cccaacatcc ggccaagctt aggtggatgt	32580

tccagcacac actcaccctg tctgtgcacc tgtttttgtg tccgtaagtg ggtatttact	32640
caccttacga gtgagccact gtgggaattc agggaggtgg cgcagtgacc acccctggag	32700
ggatatgtgt gtggcagggg tcgaggggtct cgccttccc tgcttctgc gcgtggcttt	32760
ctccaggacg gggagggctg agctgaagag gtggggacag ttgcgtcccc ccgccacca	32820
ctgtcctgcg gtgagagcag actcactgag cctgcccttc tcccttgtgc cttccagcta	32880
catctactgg accgagtggg gcggcaagcc gaggatcgtg cgggccttca tggacgggac	32940
caactgcatg acgttgggtg acaaggtggg cggggccaac gacctacca ttgactacgc	33000
tgaccagcgc ctctactgga ccgacctgga caccaacatg atcgagtcgt ccaacatgct	33060
gggtgagggc cgggctgggg ccttctggtc atggagggcg gggcagccgg gcgttgcca	33120
cctcccagcc tcgccgcacg taccctgtgg cctgcaagtt ccccaacctg gcaggagctg	33180
tggccacacc cactgactgcc cagcagcctc accctctgct gtgggagttg tccccgtcca	33240
cccctgggtg cctttgctgc agttatgtcg ggagaggctc tggtgacagc tgtttcctgt	33300
gcacctgctg ggcactaggt ccagctaat cctgtgcca ggactctaatt ttcacctaa	33360
cacacatggt ggttttcatt gctggggaag ctgaggcctg agcacatgac ttgccttagg	33420
tcacatagct ggtgagttca ggatccccc gagataccag ggcagcact cgatcccccac	33480
ccagccctga accccaccat gtgctgggat tgtgctggga gtgtccacac gcctgggacc	33540
ccagggtggt tgctctcctc tcctttttcc agatcatgag aatgaggctc agggaagttt	33600
gaaaaaaacc tatcccaagt cacacagcaa caggagcagg atttgaacct agaaaagggg	33660
accgcacact ctgttctgct agagtagtta gctgtcctgg gtgatatggc aggtgacagg	33720
ggcaactgtg ctttaacaaag gaacccccat cccctgcc aagttgggag actagaaggt	33780
caggggcaga agctctgaag ggccaggtgc agtggtgac acctctaatt ccagcacttt	33840
gtgaggccaa ggcgggcaga tgatttgagc ccaggagttc aagatcagcc tgggtaatgt	33900
agtgagacgc catctctaca aaaaaatttt ttaaaaatta gctgggcatg gtggttcattg	33960
cctgtagtcc aagctacttg ggaggctcag gtgggaggat tgcttgagcc caggaggttg	34020
aggttgtggt gagctgtgat catgccactg cactccagcc tgggcaatag agtgagaccg	34080
tctccaaaaa aaaaaaaga agaagaaaaa gaagctctga ggctccaagt cccagggcac	34140
cccttggtt gagggcagac aaggaggag agggcacct gggcagccct gacttttgc	34200
ccctggcaaa gggaccttca gtgaccttg ccctaggaga gcctctgagc acgtcagcca	34260
tgtcgaaccg cttaggaagg gcagcaagaa tttggcttct gacctctgcc tctcctactc	34320

gccatctgca ctgggtgtgg ttgtgcccatt ttacagatg aggaggctgg ggcacgcacc 34380
 agctgaatgc cttgtcccag gtactgcgta ggcagagctg gcagttgaac cccgtgtcct 34440
 ggttgctcgt ggggggtggg tgcaccctga cttgtgaggc cagtagcaag gtttgacagt 34500
 gacttcgtga ccgtcaccca gctctgcagc acatcccgtg acccagctca tccaggccgc 34560
 atgcaaacct gttgccaggc gagaaaccag tcaccgcaca gctgtggttg cctgaaatga 34620
 ttaagctcat taatcacccc ggagtgagga cagactcaga tgaaaaccag caaaagccct 34680
 ggaaactcat gtgaccctgc caatgagggc ggccatgtgc attgcagcct ggccgtcact 34740
 cctcggtagc tgttttggac ttaaagctc cggatgttta ctgagtgtt gattaataac 34800
 atggaaggcc tggcttcatt gctgtgggag tgaaggatgc acagccaggc ctgacatgat 34860
 gagaacaaga acctggagtc tcgctgcctg ggtggtaatc ctggccctgc cacttagcaa 34920
 ctgtgtgact gtagccaggc cacttaattt tgctagatcc tgccctgcgt tcagtggatc 34980
 ttgctggttt tccaagggtg ccaaacactt taaggcattc atgtggctgc taggctgcag 35040
 ggttgaacct tggctcacc cgcagggcgc cgtgtgctct gtggcctggc tgtgcctttg 35100
 ctgacaccgt gcccggtgtg gttcatgcag gtcaggagcg ggtcgtgatt gccgacgatc 35160
 tcccgacccc gttcggctcg acgcagtaca gcgattatat ctactggaca gactggaatc 35220
 tgcacagcat tgagcggggc gacaagacta gcggccggaa ccgcaccctc atccaggggc 35280
 acctggactt cgtgatggac atcctggtgt tccactctc ccgccaggat ggccctcaatg 35340
 actgtatgca caacaacggg cagtgtgggc agctgtgcct tgccatcccc ggccggccacc 35400
 gctgcggctg cgctcacac tacaccctgg acccagcag ccgcaactgc agccgtaagt 35460
 gcctcatggt ccccgccacc tccactctc gttagatcag gctggttctg ggagctgacg 35520
 ctgaaaggag cttctcatct ggggttcctg ggtgtacata gatggttggg taggttgtgc 35580
 actgcacaag ctgcatgatg ctacctgggg gtccaggctc aggttgatg gacttggtgc 35640
 ttcatcagga catagataaa tggccaaaac tcctcagctg gaaggtcctg ggcaggatct 35700
 ttgggtgtga aaaccagtca caggggaagg gtgcttgctc atactgccag cacagtgtgc 35760
 agtgctttcc atagcgtcg ttactctc aagcctggag ggtggggagt agcatggtcc 35820
 catttcacgt acaaggaacc cgatgcacag agaggtgtgg caaccatcc aaggccatac 35880
 aactggggtg ggttgagccg ggggtgactg tggcaggctg gctcaagagt ccctgctcct 35940
 gaacccttgc caggcagcct ggcacagct cggggaattt ttgccctgac ccttggaagc 36000
 aagtgggcct ctttgttctc atgtcagtga tgagaagagt gactttccta tggccctct 36060

ggagtagcagg tgtttcctgt tggcgggctc ttcccccatg acatcagcag cgagctgggt 36120
 atgattccct acgcagaact tgatagttta taaagctctt tgtcatccag gccccgttgg 36180
 agtctcacgc agacctgggc gcaggcgggg ctgggtctgc ctgtcccagc tgcattgatg 36240
 gggaacttga ggcttgcaaa ggttaagggg ctgttcgagg cccacgctgg caggagatgg 36300
 gcctgggcca gagtctggga cttcccatgc ctgggctgtc tttggctctg ttgctcacca 36360
 tccctccctg gggccatgac cttagagagc caaatggagg tgcaggtaac ccacggcaag 36420
 gaggggttgc catgactcag agtccccgtc ctgtggccgg cagtacctgg tgcaacgact 36480
 tggatttcag accagccact gtagcccgtc gacgggtgcgc tcgaagtgcc acagcttctg 36540
 aagccaggca ggactcaggc caggagactc tgtagctgtg tgagaggagg aggccaacgg 36600
 atgttctggg tctgctagag agctgggtct tccggtcctg gtaccagtgc actgagagga 36660
 ggcccagctt gattctgggg ctgccttctg gtggcatgtg ctgctcactg acaccctcga 36720
 ggagtgtctt ctctcgggct tgttgactgt gcccggtttt ccgcagttca ctggtgcaca 36780
 cataggcaca tagcaaaccg cacacacagt cgtgggtatg agtttacta cattccacca 36840
 ccagtgttca ctaccattac ctgccttccg tcttaagtgt tcatcattta aaaataaatt 36900
 tattgggctg gacgcgggtg ctcatgactg ttatcccagc actttgggag gctgaggcgg 36960
 gcagatcacc tgaggtcagg agttcaagac cagcctggcc aatatggtga aactccatct 37020
 ctactaaaaa tacaaaatta gctgggcatg gtggggcatg cctataatcc cagctactca 37080
 ggaggctgag gcaggagaat ggcgtgaacc cgagaggcag agcttacagt gagcccagat 37140
 agcaccactg cagtccagcg tgggcaacag tgcgagactc catctcaaaa aaaaaataaa 37200
 taaataaaag aaaaaataat ttatgatcta ttcaaaaat aacacatgta ctttgaaaca 37260
 gcagagacac atatgacagc gagaatgaaa ttccccatag cgcaccccca agagacagcc 37320
 ctgggtcccc cgtctttccc gtggacctcc agcggggcag atgctgagcc gcctgttctg 37380
 gagtggcatg ctatcccgtc ctccagctcc tctgtggctt acagacaccc acctgcagcc 37440
 ctgtctttgc ctctcttagc gccaccacc ttcttgctgt tcagccagaa atctgccatc 37500
 agtcggatga tcccggacga ccagcacagc ccggtatctc tcctgcccct gcatggactg 37560
 aggaacgtca aagccatcga ctatgaccca ctggacaagt tcatctactg ggtggatggg 37620
 cgccagaaca tcaagcgagc caaggacgac gggacccagg caggtgccct gtgggaaggg 37680
 tgcggggtgt gcttcccaag gcgtctctct tgctggtttc caggctgctg ccctgtctct 37740
 tagcagaggg aggaaacaga ggatggctct ggggtgaatga tgacttgggc ttcgattatg 37800

tagtcacagg	gtatgaccct	gagatgctg	gaaccccgag	actgtgatta	tatgtagaaa	37860
ctggggtttcc	cggttgttta	agtagtcatg	gtggggtcag	acccacacagg	acttttgtct	37920
tttcaagaaa	gaaaatgggc	gtgtgtcatg	caggggtagt	tggtagctgt	taatccaggt	37980
ttatccttta	ttttgtggga	actgtacagt	catttctgct	acaatgctgt	atatgctctt	38040
ctgaaagaca	cctatgcaaa	atcgacacagt	aaaaatgaca	caactcatag	ggaaagcggg	38100
gccagggcac	agccctcaaa	atctccatca	atgacatgta	agaaaagaga	ggaacctggg	38160
aaatagcaaa	gtgccttttg	cacattaaat	ggtagctat	atccacaat	actgtgcatt	38220
cgtaaacgtt	aatgctgcaa	taaatacggc	acttcacctt	gggaagatct	ggagttggct	38280
tatgagtgtg	gaaggggtga	gcgcacaggt	ttttgtgaaa	cactggaagg	aggattgtgg	38340
gaaatcaaat	ggaaagttct	cacccacaggc	gtggagaaga	gtgggtcatg	gccccagcag	38400
tgagcccagg	gaggtcagag	acggaggtgt	gtgtgtgggt	gtgacctgc	gcagttccct	38460
gccggctgta	gttttttgca	ttcgcttaat	gtttctcgtg	gaggaaattg	tgcacagcag	38520
aatgtgaaac	cgtgctgtgc	tcaaattgtc	ctaatacatc	attgcattgg	aacagattgg	38580
ctttnttttt	tttttttttt	tttttttttt	tttgaaatgg	agtctcactc	tgtcaccagc	38640
ctggagtgca	gtggcatgat	cttggctcac	tgcaaccttt	gcctcctatg	ttcaagtgat	38700
tttctgcct	cagcctcctg	agtaactggg	attacagggc	atgagccacc	gcggccggcc	38760
agatttgcat	ttttgaaaca	actgctaggg	tgggcgcggg	ggctcacacc	tgtaatccca	38820
gcactgtggg	aggccgaggc	aggtggatca	cctgaggtca	ggggttcgag	accagcctgg	38880
ccaacatggg	gaaaccccg	ctctactgaa	tatacaaaaa	tcagctgggt	gtgggtggcg	38940
gtgcctgtaa	tcccagctac	tcaggaggct	gaggcaggag	aattgcttga	accagggagg	39000
cagaggttgc	ggtgagccga	gatcacacca	ttgcactcca	gcctgggcaa	caagagcaaa	39060
actccatctc	aaaaaataaa	aaatagaaaa	acaagtgtg	tagcgggaag	gagcactttg	39120
cggagtcagg	cttgtgtggc	ctgttccaca	aatgatgtgc	tcacgggtgg	ctcaggccca	39180
cctggagtct	gcagcatggg	gcacaacagg	ttcattagt	tagaattcca	ggacaggcct	39240
ggctcctaag	cagccttctt	ttacaaaaac	tgacagagcc	gcctgtatcg	tagcactttg	39300
ggaggccgaa	gtgggtggat	cacgaggtca	ggagttcaag	accagcctgg	ccaacatggg	39360
gaaaccccat	ctctactaaa	tatacgaaaa	ttagctgggt	gtgggtggac	gcgcctgtag	39420
tcccagctac	tcgggaggct	gaggcagaat	tgcttgaacc	tgggaggtgg	aggttgcagg	39480
gatctgagac	catgtcattg	cactccagcc	tgggcaacag	agcgagacgc	catctcaaaa	39540

aaaaaaaacc tacagagcca cacggcctct ttctccaccg agtggttggtg tgggagcttg 39600
 tgttattgtg gtgaaatctt ggtactttct tgaggcagag agaggctgag cgcctggaga 39660
 gactttcaca tgggtcgcca tgtccgccgt cggtttcgct gttgtgctcc ccatctgaag 39720
 gctggtgccc tccagacagg ctggacgccc cttccacca gatccttctt cccgcagcag 39780
 tttctagtta cgttgtactg tgaggtctgt gtccttggtt gatggcaaaa gtcagccgaa 39840
 ttgaaattca gagccatgcc tggctccctg gagcttctct cctgggcagc tgtgatcatt 39900
 gcctctgctg tgggtgtgggt ggtggaaatg gattcctttc atcttgcttg ctacaggtga 39960
 ctgtcacgtg gagtcctttg gagagaggga cgtgttaatt gatggatgtg gctcccatgc 40020
 tgagaaagct cctgggcgta cattgcctta gagtttcatt ggagctgctt tcttttatgg 40080
 tgtctgctag gcagaagtga tgaagacttg gaagaaaacc cagaagggtt tccacttaat 40140
 ttggaaaatg tgcttttccc ctctgtgtc ttttgctaag gtccagcctc ctgcagcctc 40200
 cccgctctgt ggactctggc tttgattctt tattaggagt cccctgctc ccccaaaaga 40260
 tgggtgtctaa attatcatcc aattggccga ggttttggtt tctattaatt gtttttattt 40320
 tttattgtgg taaatttata taacataaaa tttgccattt taattgtttt gttattgttg 40380
 tttttgagac aggggtctcac cccagtgcct aggctggagt gcagtgggtg gatcatggct 40440
 cactgcagcc tcagcctcca gggtccagt gatcctctca cctcagcctc tctagtagcc 40500
 gggactacag gcatacacta ccacatctgg ctgatttttt gtattttttt tttattgtag 40560
 agaccgcgta tgttgcccag gctggtctca actcctggac tcaagccatc ctcccacctc 40620
 accctcccaa agtgctggga ttacaggcat gagccacaac acccagccat tttaattttt 40680
 tttttttttt ttgagatgga gtctcactct atcgcccagg ctggagtgca gtggcgtggt 40740
 atcaactcac tgcaacctct gcctcccagg ttcaagcgac tctcctgcct cagcctcctc 40800
 ccgagtagct gggattacag gtgcccata ctatgcctgg ctaatttttg tatttttttag 40860
 cagagacggg gtttcacat gttggccagg ctggtcttga actcctaacc tggatgatccg 40920
 cccgcctcgg cctcccaaaa tgctgagatt acaggtgtga gccaccgtgc ccggcctttt 40980
 tttgtttttg agacagggtc ttgcctgtc acccagactg gaggatgca gtgggctctt 41040
 ggctcactgc agcctccgcc tcccaggctc aagttgtgca cctccacacc tggctaactg 41100
 tattttatgt agagacagat ttcacatgt tgcccaggct gggcttgaaa tggactcaag 41160
 cagtccaccc acctcagcct cccaaagtgc tgagattaca ggcgcgagcc accgcaccca 41220
 gcccatTTta cctattctgc agttgacagt tcagtggcat tcagtcagtt cacgaggtaa 41280

ccatcactgc cattcatctc cagactactt caccttctcg gcagatgtcc gaaactgtcc	41340
gcattgaaca cactcctcat ctccctctga cagccaccat tctactttgt atctctctct	41400
gccttctcta ggtacctcat gtaagtggaa ttataccaat atttgccctt gtgtgactgg	41460
cttctttcat gtgacatggg gtcctcaagg ttcactctgtg ttatagcctg tgtcagaatt	41520
tccttcctta aagcctgaat aataaccctg tgtaaaggct gggcgcggtg gctcacaccc	41580
tctaatacca gcattttggg agtccgaggt gggcagatca cttgaggtca ggagtttgag	41640
accagcctgg ccaacatagt gaaaccctgg ctctactaaa agtacaaaat tagctgggtg	41700
tggtggcgcg cacctgtaat cccagttact caggaggctg aggcaggaga atcgcttgta	41760
cccgggaggc agaggttgca atgaaccaag attgtgctc tgcagtccag cctgggtaac	41820
agagtgaagc ttctgtctc aaaaaaaaaa aaaatcatcg gatggatgga cggaccactt	41880
cttggtattt atccatccac ggggtgctagg tttcttccac ctttggttgt cgtgaataag	41940
gccactatga acatttcctt ccgtggtgaa ggttttgtac tagtgaggaa aaggcgtgtt	42000
tgtggtgttg cataggatc tggttaagaaa gtttgcacta accataagta tttgtactac	42060
attaaaaatga aagctcaggg gccggggcgcg gtggctcacg cctgtaatcc cagcactttg	42120
ggaggccagg gcggggcgat catgaggtca ggagatcaag accatcctgg ccaacatggg	42180
gaaacccctg ctctactaaa aatacaaaaa aactagccag gtgtggtggc gggcacctgt	42240
agtcccagct acttgggagg ctgaggcagg agaatggcgt gaaccggga ggcggagctt	42300
gcggtgagcc gagatcgctt cactgcactc gagcctgggc aacagagcaa gactccgtct	42360
cacgcaaac tctgtctcac gcaagactcc gtctcaaaaa aaaaaagagt tcagggttta	42420
tgaaactggc cagccgcgta aagtttgctg tgttggtttt gtgcccggga ggagtgtggc	42480
cagggtgtca cgtcacacag tacacgtttc tcagatgggtg gttctccaga ctgctgtccc	42540
aaagtctgtt tttgcatctg gttcccacag accaccctc cacggtgagc ctgattttgg	42600
ccagggtagc tggaatcttg cttgtctttc agcccgagc ctgtaccagt ccagggtcca	42660
cagctagtgg cttttaggaa ggaatttggt cagttggctt tgacacatgg cccctaggg	42720
tccacagctc tgtagtgatg tggatgttgt tatctacaaa gacacatgat cttctgtgtc	42780
cagatgaaag tgatgatgtc tttgcagctg ccagcaagg ctgtgtgtgt gtgtgtgtgt	42840
gtgtgtgtgt gtgtgtgtgg tgtgtgtgtg gtgtgtgtgt gtgtatgggg gagggaggca	42900
ccctttccat ctgggggtgt gtgtgtgtgg ggtgtgtgtg tgtgtgtgct cgtgtgtgtg	42960
gtgtgtgtgt tgtgtgtgtg tatgggggag gcacccttc catctgggtc caagagactg	43020

ggcctgggga agacgcttct ttttatctac ttagagactt tgttttatct gtattttttt	43080
gagacagggg ctcactctgt caccaggtt ggggtatggg gatatgagca tagctcactg	43140
cagcctcggc ctcccaggtt gaagcgatcc tcccacctca gccttctgaa tagctgggac	43200
tgtaggcgtg cgtcaccata ctgagctatt gttttttttg tttgggtggg ttaatttttt	43260
ttgatacaga tggagtcttg ctatgttgcc cagactagtc tcaaactcct gaactcaagt	43320
gattctccca cctcagtttc ccgacattct gggatcacag gtgtgagcca ctgctgtctc	43380
cctgttttat taactgctga aagacctaga taaagaaagt ctgaaaagac ttactatcag	43440
agcaccatcc taagatgatt ccctctgact caatggagag ggaggggagc ttttccttca	43500
ggcctgggtg gcaggagccc aggtgctcca ggccccattt gccccaggcc aaatcactcg	43560
ggaacttggg tgcagctgtc ttccagggtg acccaaagga accagatccc cgcaggcagt	43620
aggcttctgg gctgtcctct cctcctacgt cagctcagta agagcccttc gaagggatgc	43680
tgtgtcggag gccccaaaag ccagagctca tccctgagat gcacaggggtg ggctgggctt	43740
aggcagcgtc cgagcatctc ctggacgggtg accccagaga gtgtggagac ggagagtcct	43800
tgagagtcac tgagagacgt ggctgccttg ccttcccaag aggggctctg agtcattccc	43860
cacactcacc tgccctacc caccctcacc tggccccag cctcacctac ccccatct	43920
gtaccgatcc ctttaccgc acctcccta cccacctca cctccctgt acctcacct	43980
ccccactca ccgccccctg caccctcacc tgtccccac cttcacctaa cccccacct	44040
cacctgccct cccctcacct ggctccttc cgttggggaa ggggttgtaa ggggcggccc	44100
ccaaactgtc tgtcctgggt cctgcagag aaaacagtac gtgagggccg cagtccaaaa	44160
gcttgagtcc tggaagggtg aggagacagg gatgtgttg gaagggccc atggtcttg	44220
atcccttctc gactgtcaat ggggccttca tgggagcgcc agtctagtga tgcacagctg	44280
ggtgcccggc ggggtggctga ggaggcctaa agtccgaggc ggcaagagct cttccagagg	44340
ctgttgtcct aatcgctctg gcatactcag gcgggcagct agttaggagc tgattggaga	44400
ggagagaccc ccacaccaat actgggattt gactttcagg ctaaacttga gaagtgtggc	44460
ctctgctgtc ctgccagagc tctccagcca gtgccagggt ctctccagcc agtgccggg	44520
ggtctccacc agtgccggg ggtctccgcc agtgccagggt gtctccgcca gtgccagggt	44580
gtctccgcca gtgctcagga gtcttggttt ctttgtctta cagcccttg ttttgacctc	44640
tctgagccaa ggccaaaacc cagacaggca gccccagac ctcagcatcg acatctacag	44700
ccggacactg ttctggacgt gcgaggccac caataccatc aacgtccaca ggctgagcgg	44760

ggaagccatg ggggtggtgc tgcgtgggga ccgcgacaag cccagggcca tcgtcgtcaa	44820
cgcgagcgga gggtaggagg ccaacgggtg ggtgggggtg ctgcccgtcc aggcgtgccc	44880
gccgtgtctt ctgccgaatg ccagcctctc acaggctggg gagactttcc accctgggga	44940
tccaatgggt ggctttccag ggtcccaaaa gcaaacacag gctctttcac agcccccca	45000
ggaaagcaga aagccccaag ggctggaagg gaagggggag ctctgctgag aggttacaag	45060
gcagcgtgg ccgacgggag ttgcagttga taggttttgt atcatccttg ttaaacttga	45120
accctgtgca gaaatccctt ccacggcatg ggggctgcct gttgactcgc tctgttcca	45180
ccacagggag ctctgggct tcttctccc agaggcccc gacgctcca cctgttggtc	45240
gtcagagctt ctggttggtg ggaaggcacc caggaccttg aggtctccag agagaaaagc	45300
cagggaaaga gggagaccga aaccatgtg acatgaaact caggctccaa actgagcacg	45360
ggaacgtttg gggacaggag cgcatggcc ttctcagat agctgggggg ctggcatgaa	45420
gacgggagct acagccagca caggctctgg gccgggagcc cagagattga gccctgactc	45480
tgtcacttac tggccacgtg accttgggcg ggtggcatag cctcttgag actcagtttc	45540
ctcattggta ggagtgcgg ccacagtggg gcggcctctg cagcacacgg ggggctcggg	45600
gggcggaagc cccgggtcta taaggcggct gtgcaggagc cagccgagct ggtctcccaa	45660
cagccagggc tccggggtcc ttagcagctg tggggggcct gcacctgttt cccatggctg	45720
ctgtcagaaa ttaccagaag ccagggtggct gagagtaatg gacacttgtt ctctcacagt	45780
tcttgagggc tgaagcccga gatcgagggtg tgggcagggc cctgcgccct ctgaaggctc	45840
tgagggaaacc tttgggcttc tgggtggctcc aggcaccct tgacttgtgg tctgtcact	45900
ccagtctctc tgtctggctg cacatggcgt ggctcttct gtaccattga aggacacttc	45960
agttggattt agggcctacc ctacccatt gtggtcgtat cttgatcctt catgacattt	46020
gtaaagaccc tgcttccaaa taagctcaca ttctgaggtt ctggggtgag cgggaatttg	46080
gagagcattg ttcaactagt atagaatgtg acctgtcagc ctcgggcagc cctgagaggc	46140
aggggctttc cacagcccag ctgggtgccc tgggctccgt gctgtccgag gagacgcat	46200
ccccacacc gtccttcacc cgccaccctc ccgcaggtac ctgtacttca ccaacatgca	46260
ggaccgggca gccaaagatcg aacgcgcagc cctggacggc accgagcgcg aggtcctctt	46320
caccaccggc ctcatccgcc ctgtggccct ggtgggtggac aacacactgg gcaagctgtt	46380
ctgggtggac gcggacctga agcgcattga gagctgtgac ctgtcaggta cgcgccccgg	46440
ggcctgcctt aaccgcagac acccggcctt cattgtcagt aatggcagca gctgccacat	46500

tgccgagac ctgccgtgag cccagtgccg cgcaggggc tttgtgtgta gcgtgttttg	46560
tcctcacact gacagctgta ggctgggggt ctgagtgagc cccacagggc agaggcagaa	46620
aatgagtctc agagaggggtg agcgagctgc ttggggcccc acagcaggag atggagcagg	46680
actgcagcct agcctctgcc cccagcacct gcgcaagaag ctgctctgct ctggactgtg	46740
ttaggctgcg agggctggag agaaatgaga gttgggtgctt agagaggggg cgcagggtccc	46800
catggctttt cctcttatga tgaggtagat ggggtgaagg aggggccatg cttgcagggg	46860
ccagtgaccg agggccgcgc ttggaactga tggccttcat cccagagcca gccaggtgg	46920
gagcagggct ttccgagggc ttgtcttggg tggcctgct tccagggact ctgctgcagc	46980
tcccaccct gtccaaagca tggaatcccc caggctcctt ggagtcctg tcaacctctg	47040
tcctcccaag ctgagtgtgg ggcaagttct ggaggtcagc actgctcagg ggggcccacg	47100
ggctgcttgc aggggccaac cgctgaccc tggaggagc caacatcgtg cagcctctgg	47160
gcctgaccat ccttggcaag catctctact ggatcgaccg ccagcagcag atgatcgagc	47220
gtgtggagaa gaccaccggg gacaagcgga ctgcaccca gggcctgtc gcccacctca	47280
ctggcatcca tgagtgagg gaagtcagcc tggaggagtt ctgtacgtgg gggctggcag	47340
tggggtgggc aggggtggcct ctaaacccga cccctggagg aggctggagg ccagtgaag	47400
atcctgtgtg gcctcagcca ggcggtggtc tctgccagat gccactgtt gccgctggg	47460
gttcagcgac atgtccgaat gtcccaggc ctctgagggt gttttctttt gccgcagaac	47520
aaatcaccac gaacagcgtt ttaagacaac accaactctt tttttttttt ttttttttga	47580
gtcaggatct tgctctgttg cccaggctgg ggtgccctgg tgcaaacaca gttcactgca	47640
gcctcgacct ctgggcttaa ttaagtgaac accttgctc agcctcccag gtagctggga	47700
ctacaggtgg gcaccaccac acctggctaa tttttttttg tagagacggg gtttcccat	47760
gttgcccagg ctggtctgca actcctgggc acaagctatc tgctgtgtg ggcctccaa	47820
agtgttagga ttataggtgt gagccactgg cctgacaaca cccacggatt gtctctcagt	47880
tctgtaaggc aaagtccagg cacagcgtgg ctcacctggg ttctctgctc agggctctac	47940
ggggccagaa tcaagggtgc aggaacgtg ggcctcagc ggaggctctg tggagaaatt	48000
agcttccttg ctactcagc aggtagcagt tgtgggatcg aggttctgtt ttctctctgg	48060
ttattggctg gggaccactc tcagctcta gaggccacc caggctcctg ccccggtggc	48120
ctctctgct cagcagtggt ggctcctgc gtcagtcct cccgcacctt gagtctctct	48180
gatttgcttc taaagggccc tgtgattcgg ctcagccacc ttagattag gttagcctcc	48240

cctttgatag actccaagtc ggctgattaa taaccttact cacatctgca gaatcccttc 48300
 tgccacataa ggcatgacg ccgtgctggg gactgggggtg ggaaattacg gggtcattta 48360
 ggattctgcc tgccactgcc ttgctgtgtc ccagggcttg ggggaggggc ctccacagct 48420
 gggaccacag tccttctctc cctccatggg aaccatctga ggattacttg agaccagcct 48480
 gggcaacatg gtgagaacct atccctacaa aaaatacaaa caaaaaggga ccaggctggg 48540
 cttgggtggc catgcctata atcccagcac tttgggagac caaggtgggc tgatcacttg 48600
 aggttgggag ttcgagacca gcctgcccaa catagtgaat tcccgtctct actaaaaata 48660
 caaaaattag ctgggtgtgg tggcaggcgc ctgtattccc agctactggg gaggctgagg 48720
 tgggagaatt acttgaacct gggaggcggg agttgcagtg agccaaaatt acgccactgc 48780
 actccagcct aggcaataga gtgagactcc gtctcaaaaa aaaaaaggg ccaggggtgg 48840
 tagtgacaaa gagaccctat cccaaaaaaa ccgaacactg aatccttgag actgagtaag 48900
 gacactgtga aatttttctg ggtggggcag ggaacagagc gtcttctgtc atttcttcca 48960
 cctgggtgtg gtcagctctc cctccaagct gcctctctt cttctcattg tccgggtgtt 49020
 ggacacattt ggtaactgg atagaataac gcgagttccc agggacttg tccatttgct 49080
 attttatttt attttatttt attttatttt attttatttt ttattttatt attttatttt 49140
 tgagatggag tttcgttttt gtgcccagg ctggagtga gtggcgcgat ctcggttcac 49200
 tgcaacctct gcctcccagg ttcaagtgat tctcctacct cagccttcca agtaactggg 49260
 attacaggca cccaccacca taccaggcta atttttttgt attttttagta gagacgggtt 49320
 ttcgccattt tgcccaggct ggtcttcaac tctagcctc aggtgatcca cgcacctcg 49380
 cctcccaaag tgctgggatt acaggcatga gccaccacgc ctggcaccat ttgctatttt 49440
 aattcccatg tgtattagt tcccacggct gctgtaacaa atgaccacaa actggatggc 49500
 ttaaagcaac agaaatggat tccccaatg tgctggagac cagaagcctg cgaccaaact 49560
 gttgggaggg ctgtgcttcc tctgggggct ccagggagga tctatttggt ggcccttcca 49620
 gtgctgtggg tgccagcgtt ccacacttgt ggatgcgcgc cctcaacctc tgcccatctt 49680
 catgtgtcca tctcctttgt gtctgcgtct ttacctctt tcttgtctg tgttgctctt 49740
 tataaggacg tttgtcattg ggtttagggc ccacccaaat catccgagat gacctcgtct 49800
 tgagatcctt aacctgcaaa gaccttttt ccaaaaaaag gttatgctca cagattctag 49860
 gccttaagac atgggtgtat ctttctgggg ggcactatcc aacctttat acaatgaaag 49920
 acgggaagag ggccagggtg ggtagttcac gcctgtaatc tcagcacttt aggaagctga 49980

agcgggagga tcacttgagc ccaggagttt acaagtagct aggcaacatg atgagacccc 50040
 atttctacaa aaagtaaaaa aaaaaaaaaa aaaaaaaaag ccagggtgtgg tggctcacac 50100
 ctgtaatccc agcactttgg gaggctgagg caggcagatc acgaggtcag gagattgaga 50160
 ccacctctggc taacacgggtg aaaccccgctc tctactaaaa atacaaaaaa ttatggccgg 50220
 gcgcagtggtc tcccgcctgt aatcccagca ctttgggagg ccgagggtggg tgaattacaa 50280
 ggtcaagaga tcgagaccat cttgggtaac acgggtgaaac cccatcaaga tcacaaggctc 50340
 aagagatgga gaccatcctg gctaacacgg tgaaaccccg tctctactaa aaatacaaaa 50400
 aattagccgg gcatggtagc gggcgccctgt agtcccagct gctcgggagg ctgaggcagg 50460
 agaatggcgt gaacccggga ggcggagctt gcggtgagcc gagatcgctc catgccattg 50520
 cactccagcc tgggtgacag agtgagactc cgtctcaaaa aaaaaaaaaa aaagaaaatt 50580
 agccaggcac agtggcaggt gcctattgtc ccagctactt gggagggctaa ggcaggagaa 50640
 tggcatgaac ccgggaggtg gagtttgag tgagccgaga tcatgccact gcgctccagc 50700
 ctgggcgata gagcaagact ctgtctcaaa aaaaaaagcc aggcattggtg gtgcatgcct 50760
 gtagtcccag ctactcaaga ggctgaggca ggagggttgt tcgaccacg gagatcaagg 50820
 ctacagttag ccatgatgcg accactgccc tccagcctgg gtgacagagt gtgaccctgt 50880
 ctcaaagtaa gtaaatagga ggagagacaa gtgggcagtt cagactgatg gtatgggcac 50940
 agtagagact ggtgcagaca ggctggcctg tgatgtcaag caacttctgt aactgtttcc 51000
 ggcattccatt tgttgtgcaa tttccgtgtc agtaggaaga ctctgtaggc tgccaagagg 51060
 aataagtggg aggatcctcc cagagaggcc gggcctgcag gagggccagt tctcatgagt 51120
 tcttatttgg cccctaccct ccaggctgtg gttctgaggt gggagacaga gcctgacctc 51180
 tgtttgtctt gttttgtctt tgcagcagcc caccatgtg cccgtgacaa tgggtggctgc 51240
 tcccacatct gtattgcaa gggatgatggg acaccacggg gctcatgccc agtccacctc 51300
 gtgctcctgc agaacctgct gacctgtgga ggtaggtgtg acctaggtgc tcctttgggg 51360
 tgatggacag gtacctgatt ctctgcctgc taggctgctg cctggcatcc ttttaaaatc 51420
 acagtccttg tggcatccag tttccaaagc tgattgtgtc ttcttttgcc ctcttttctt 51480
 ttctactatg tgcattcggt gctatgaatt ttctctaaag tactgcgttt cctgcatctc 51540
 acaaattttg ttacattttc attttcaggt agtttgaata tttttacact tctcctgaga 51600
 tgacatcttt ggctcatgtg ttatttagaa gtgttgctta gtttctaaag agttggggct 51660
 tttccagctg tctctctgca actgatttct aatttaatto tactgtagtc tgagagctta 51720

ttttatatga tttctgttat tttaaatgtg ttgggtgtgg tgtttttggt gttattgttt	51780
ttgtgtcttt ttgttttggt ttgcttcgtt tgttttgttt ttgagacagt gtcttgctct	51840
gtcactcagg ctggagtgca atggcgcat ctcagctcac cgcaacctct gcctcccggg	51900
ttcaagtgat cctcttgccct cagcctcctg agtagctggg attacagggtg cacgccacca	51960
taccagcta atttttgtat ttttagtaga gacgggggtt caccatgttg gtcaggctgg	52020
tctcgaactc ctgacctcgt gatccgccc cctcggcctc ccaaagtgtt gggattatag	52080
gcgtgagcca ctgtgcctgg ccattagggtg tgttttatca cccagcatca tgcagtttat	52140
cttgggtgaat gttctgtgta ctcttgaaaa gaatgtggat tctgctgttg ttgggtggag	52200
tgtccagaa acatcaatta gatccagttg gttaatagtg ctcacaggt tgtctctatc	52260
cttcttctct gactgcctgc ttgagctgtc agttattgac aggggtgtgg agtctccaac	52320
tctaattgtg gatttgttta tttctcctag tagttctatc tttttctctc cttctaccct	52380
tgatcctctt ctccccctag ggcttcctgg tgttgggtgg gggagagtgg ggtagtgaag	52440
aacctggact ttagggccaa agaggccagg gttcaaacc tggtctgtc acttcccagt	52500
tgagtgacct tggtgtgtgc ctgaatctct gtgagcctcc acttctctct ctgtgaaatt	52560
gagagcactt acctggcagg ctgtcatggg catcaagtaa cagggcactc cacctggacc	52620
ctgacacgtg atgcacagga atgccagctg ctatgccatg ggtgtggcag tagtaataaa	52680
gtgacctct gtatctcac cacagtgaag cctgtccagg gctttctctc ctatgcccc	52740
atgcctccag gtggccttg atcctgttg ttctgtgtc tgctcagcga cttttctccc	52800
gtgggagttc ctgggggttc agcttcatcc tacagacagc agcacacact ggctgtgcac	52860
cctttttttt tttttttttt ttttttttga gatggagtct cgcttttttc gcgcaggctg	52920
aagtgcagtg gtgtgatctt ggctcactgc aacctctacc tctgggttc aagtgtttt	52980
cctgcctcac cctcccaagt agctgggatt acaggctccc accaccacgc ccggctaatt	53040
tttgtatttt cagtagagat ggtgtttcac catgttgccc aggatggtct tgaactcctg	53100
acctcagggt atccgcccac ctcagcctcc caaagtgcag ggattacagg cgtgagccac	53160
cacaccggga gtgcccgttg ttttagcag ttgtcttgt tctggagag actggctcct	53220
gccaggagc tcggggagta gggccgctgg gtgtgcctc acacctcag tttggccgta	53280
agcagagggg acattttgtg actgtcccc tctgagctt cccagcagct tttctccaag	53340
ttacagccca aaagctcagg tggatttgca acccaacggg gtctgtgcac ctcccactga	53400
tgcccgaact gccctggcca agaaacggg ccgtcagaac gctgcactaa ctgcagcctt	53460

gggcctccat gccagaggcc atgcccctcc atccaccacc cctggcctg ggccctggcc	53520
ctcctggctc gggaactcca ggccccctcc tcacggatcg agagacgtgt atttaccgca	53580
caggtgcttg tcattctctt gtggcctctt ctccaggag atcacagaag gacagggcct	53640
cactgaggtc tcggacatgg accctttgat agtggcagga gccaggctgg gcaagaggcg	53700
gccacagtca cctcagcagt gccatcacca ccgccattca gcccttcctt gagccgggcg	53760
cgccccctggc tctggcccca gtgtcccagt tacagctcac aggagcttgt ggtgcccagc	53820
ggctgcttct gattgagagt cgaggctcga ggctttggga ggctgagagg ctgctcggtt	53880
tcacaactgc tgaggagagac ttgggctcca tctcaggtct gccccatgtc gccctcaacc	53940
tccagccacc ggtcctccgt gtcccccatg gccaggcacg gcttgacagc atctgtcggt	54000
ggctcctctc agccgtcgtg ggctgacctt ggcacgtcct cctgtggctg agcccagtg	54060
ggacagctgc ttccctttat taccctagaa ctctcgtctt tgatcaggcc cctcccccta	54120
tgccacacag tccctgtcac tcgggtgagc ccagtagtca tggggaaggc ctgcgggttc	54180
caaacatcca aaggcttgcg tgcagcatga cagcttgaaa ccgatgtttt ttaccttgat	54240
cagatttcag cttggcgggg gctttgtcga gctttcagtg aggcctgggc cgatttccca	54300
gcatccccctc ctgaggccag cctctgtttc ctgtgatttt ctgcacaaag tgggaggag	54360
gagtcttagg aaatgggggg ccacctcgaa acctaggcct cctctggctt ctctgtgcca	54420
gtgccccac gctttgtgtc tgtgtcccca gccatggga ctgtgttatt ccctgagtgc	54480
tgccgcatgc ccagcccgca ctgaggacgt ggagccccga ggggcaggat ggcctccatg	54540
gtcacacgta ggaagtggcc tccacctcc gatgatcctc tccccccctc cctttcagcg	54600
ccttccccgg ggggtgtatc agccctcctg cctgtgcttt gtcccgtctt ctgcaggcgc	54660
atgggacgtg ctgacaggtc ctctgcggg ttctgtcctt gctatgcgca cgctggtcac	54720
cacagaggcc tggcccttct tctgtagcag tcccacaccc gcaacagggtg tggctgctga	54780
ccacctgctt tctgccccctc tggtcctgag gagggcgcag tgggcactca ggcgtggctg	54840
agcagatgtg tgttgccggg aggaggaagg actgctccag tcagggtga atttcccacc	54900
cggagcattt ctgctgtatt tgggtgtagc cctgctgctt aaagctctga ttcccagttg	54960
gcaccctttc cttcttgcac tgaaaaacat acggatgcat gtcttcttgc agtgaatgtg	55020
tattctccca gcctctcttc tgggttgggg ctggagggtg agcggcacac aggagccgca	55080
gcgatggagg atgtgcgggt gcagcaccac gtacagcagg gatgccaaac ccgcgctgag	55140
tccctctcaa cttctgcttt gaagcccagt cacgccattg cctgggtttt gctgggcggg	55200

gctgcatgtg atgttctect ctgtccctcc cccagagccg cccacctgct ccccggacca 55260
 gtttgcattg gccacagggg agatcgactg tatccccggg gcttggcgct gtgacggctt 55320
 tcccagatgc gatgaccaga gcgacgagga gggctgcccc gtgtgctccg ccgcccagtt 55380
 cccctgcgcg cggggtcagt gtgtggacct ggcctgcgc tgcgacggcg aggcagactg 55440
 tcaggaccgc tcagacgagg tggactgtga cggtagggcc ctccccgtca aggtcttgc 55500
 aagacctgg cctgcccctc cgggatacga gcttggggct gcctccggcc tcacaggagt 55560
 aggggctctg aaaacctttg cttgcagga gattgccaag tctgtctttt aggcccaaca 55620
 aggaaaactc tgcagttcca cccatcctgt cccaccaggt agtgtggctt gaaggcagac 55680
 tgtgagggtc tatctcacct tctgcatta ggtcaggagt ttcacagaaa cctgaggcac 55740
 attcaggggt gggctgcaga ggtccatggc tcacaccctg gaaaatccgc cccaaaaga 55800
 cagtgtgtc tccactgacc agtctgtggg atagtgtta agcctgagtg gtttctatca 55860
 acatgtagaa tcaggaggt taaagagatt tgctcaggca tctggggccc tctctgacca 55920
 gcaggatctt ctttagatc ttgacagtga aacacatctc ttctgtgccc cctgtgagtt 55980
 ttctttcatt cattcattca ttcattcatt cattcattca ttcgagacag agtcttgctc 56040
 tgtcaccag gctggagtgc cctgggtgta tctcggtcga ctgcaacctc tgccctcagg 56100
 gttcaatcga ttctcctgcc tcagcctccc gagtagctgg gatgacaggt gcgcaccacc 56160
 atgcctggct aatttttgta ttttagtag agacaggggt tcaccatgtt ggccaggctg 56220
 gtctcgaact cctgacctca ggtgatccgc ccgcctcagc ctcccaaagt gctgggatta 56280
 caggcatgag ccaccgcgc cggcctgagt ttctcttta tgaaggacct gcttggttgg 56340
 ttgcctgcca catgttgtca gcaccatggg cccaggactg ctgaggagct gttgatgccc 56400
 tcgctctccc agagccaccg gctctgttag ataattcaca tgcagtctgg ccactgtcct 56460
 acgtcctcat tcacaaagag cagacatttc gtagaagatg agggcctggg agtaacctcc 56520
 ctgcatgttt ttctataaag gcatagtggg taagtccttc cagctcattg accattggag 56580
 aattttatgg aggtgtaga ctaggggctg gtaactaag ggcccagggg ccaaattccag 56640
 cctgccacct acttttgtaa ataaagtttt cttggtgcac agccatgccc attcattcat 56700
 ttgcacaatg tctgtggctg ctttcatgcc aaaagcagga gaactgagtg gttatgctgg 56760
 agacctacgg cttcaaagc cccagacctc acgtctggcc cttgacagac agagcttccc 56820
 cagccctgct gcgcctcctg gccagcatg tgctgtgtgt gtgatttcag cttgcaggag 56880
 ccgtgggttag gaattgtccc tgtgttggtc cattttgcat tgctatgaag gagcacctga 56940

ggccgggtag attatgaagg aaagaggtct gtctggctca tggttctgta ggcagcacca 57000
 gtatggcacc cgcactctgt cagcttctag tgaggtctca ggaagctttg actcatggtg 57060
 gaagtccaag cgggagcagg tgcacacat ggtgagagag ggagcaacgg agagagagag 57120
 agagagagag agagcgctc tccctcttgc cctcaccttg agaggagatg ccaggctcct 57180
 ttaagtaacc agctcccatg tgaactcaca gtgagagccc atttgctact gcggagaggg 57240
 caccaggcat ctgctcccat gaccctaaaca ctgcccacca ggccctacct ccaaccttgg 57300
 ggtcatatth tattctgttc tatgctatgc tatgctatgc catgccatgc catgccatgc 57360
 tattcctatt ctattattht agacagaatc tcgctctgtt gccaggttg gagggcagt 57420
 gcatgatctt ggctcactgc aacctccacc tcccagggtc aagcgattct cctgcctcag 57480
 cctcccgagt agctgggatt acaggcacac accaccacac ccgggtaatt ttgtattht 57540
 caatagagat ggggtttcac catgttggcc aggtggtct caaactcctg gcctcaagt 57600
 atccacttac ctggcctcc caaagtcca tgattacaga tgtgagtcac tgcgccagt 57660
 gagggtcaca ttccgttga gatttggagg ggcagacgtt ggagccatct gagccccctc 57720
 gtcccgctct agcttctcct ccggtgtgccc ccggggtgct ggtggcaggc ccttacgccc 57780
 gttctggctg cagctctgt tccagaagct ttcttccctg cttggttacc agaaaatcat 57840
 cccatccatt acaaggacag ggtccctta tctccattc ccagggcagg acaccggggg 57900
 cagggcaggt ggggaactga gcaagttctc tgggggcagg cgtggctatg gctccctctg 57960
 ggtgggcgtc tggggagggg tggaggcagc cgtcagcgc ctggcttgc cttcctccct 58020
 ggccagagac tgtggccttg tgctgtccc gtgtgggctg cctgcacctc cagtgggttg 58080
 tgctccctcc cctccctcc cctcaagctc tgctgagcac cactgccttc cacagcccc 58140
 actctcgga ggcgaggctc ctggtggcca ttctgtcct tggcaccac cccccacca 58200
 acctggtaga gccttgggcg ggtctgtta ctcttgcat ggcgtagacc tccccacagt 58260
 aggacctga cacatactc ctggggggca ggcaggaggt gcgttgaggt ctgagccctg 58320
 gcagtcctc cctgcgttg cataggctc gccacagggt catcgagggt ggggtggagac 58380
 tgtactagac cactccccgc tggctctaga aagggtccca tctgtctgct ctctgtttg 58440
 agtcagacc ttggttgctg tgccctgcat ggtgggctg ggggcacct ccagcctctc 58500
 tgagtgcag gcctctcct gcagccatct gcctgcccac ccagttccgg tgtgcgagcg 58560
 gccagtgtgt cctcatcaaa cagcagtgcg actcctccc cgactgtatc gacggctccg 58620
 acgagctcat gtgtggtgag ccagcttctg gcacggggaa ggggcgtccg ggctgggttc 58680

ccccaggaac gtggagttaa ggggaggaga cgtgcctttc cagcggggct gggggctgtg	58740
tgggagactc aggcggctgg gaggtcctt gcgggaggca ggaagcctt tcccagggca	58800
gcggccagga ggacagactg tgagctgtgg gctcggcggc tacagagtct gcctcagtgg	58860
gccccgctga tgggtgtccag gtgcctgcag cagcaccaca cccacgggac cttgctgagc	58920
agcgtctgtc aggcagcaag attaccogag ggctgcagtg gtctgtttcc ctggcagctt	58980
actgtctggc tgaggaggag tgatgttcac atatgcacac atgtcatgtg cacacacatg	59040
tacatgacaa catccacat gtcctcaaa tagcatgacc tgtacagtca cggatatagg	59100
gcctagggga taggaggcca agacagtcag ggaagacttt ccagaggcag tggctcctga	59160
aaggctgtct gattcaggca ggaaggagc tgagttcaga taggaagtag caatgagtca	59220
ttgtgtctgg ggacatggcc actccttcgc tgcagaggga cctgggctga gagctcctct	59280
cttatggctg cagtcgggag agaagtctgt tggggggaga agggggcttc ctcaagggac	59340
tccctgtgcc ctttggcacc ttcgtgccag gtcaggcttg aggcctgaag gcagtggctg	59400
gggccaccaa gggtcgcctc ctctgctggg caagttccca gtctgacggg cctgtgccgt	59460
gggccccagc tgtggggggc ctgttgatgc gcagccaggc ctgcgcgcca gagcccgcac	59520
gcttccattc cgtgacttc atcgacgcc tcaggatgc tgggcccggc ctgtgggaga	59580
gtgaatgtgg cttttgcaa agttgagtct ggagcctgga aacttcccta tgggcagcct	59640
tgatagtgga gtggcccaag gagcccaccc agccgaccct gccctcccg tggctggctg	59700
gcggcaccag gggctgcctg gctttgctcg ttcaccaaca tcaccgggc tggccagggc	59760
gcgctcactt ctgccaccac cgagggccct gggcgaagga gtgaatacca ggctgcctg	59820
gcagggatgt gttgagggt gtggggagtc ggacagcggc gggggtcaga ggaggaggag	59880
ggtgcaccgt gcaggctgaa gggccacgtt accctgaggt tggccaggct cccagggcct	59940
agcctcccag cccccccact ttctccccac cctccaccag tggcaaagcc agccccttca	60000
gggcgcacgg tgtctgcccc caaggagggc ccattccgtt ggggttaatg ttggccacct	60060
ctttctgttt gtctctggca gaaatcacca agccgccctc agacgacagc ccggcccaca	60120
gcagtgccat cggggccgtc attggcatca tctctctct cttcgtcatg ggtgggtgtct	60180
atthtgtgtg ccagcgcgtg gtgtgccagc gctatgcggg ggccaacggg ccttcccgc	60240
acgagtatgt cagcgggacc ccgcacgtgc ccctcaattt catagccccg ggcgggtccc	60300
agcatggccc cttcacaggt aaggagcctg agatatggaa tgatctggag gaggcaggag	60360
agtagtctgg gcagctttgg ggagtggagc agggatgtgc taccacaggc cctcttgcac	60420

atgtggcaga cattgcta at cgatcacagc attcagcctt tcccactgag cctgtgcttg	60480
gcatcagaat ccttcaacac agaggcctgc atggctgtag caaccacccc ttgggactg	60540
taggtgtgga gaaagctcct tggacttgac cttcatattc tagtaggaca tgtgctgtgt	60600
tgtccacaaa tctcatgta ccctagaaat gaatgtgggg gcggctgggc tctctccaga	60660
gctgaaggaa tcaactctgta ccatacagca gctttgtctt gagtgcagct gggatttgtg	60720
gctgagcagt tacaattcct acgtggccca ggcaccagga acgcaggctg tgtttgtaga	60780
tggtctgggca gccgcacgc agagctgcac catgctggtt tgtatcacat gggtgaccat	60840
ggatatgtcta agaaggtgga gtccctgtga ggtctgcagg tgccccaca gctccaggcc	60900
accttgagga ttgcctctgc ctgcccagcc ctgagttccc tctcccctgt cctgtcccac	60960
tgtcacccca agccggcctc attgggagcc tggtggatgg cagggtatag atgtaacctg	61020
attctctctg gggagcgggg ttatctggct tctcaagagc tcctaggagc ccacagtgg	61080
ggcaccatca cagtcgcagc agccccaga gaacgcggcc ctgtctgttc ctggcgtgct	61140
ctgtgctgcc ccgcctgggt tccctgccc agtcgcagc cccttgagg aggtaccatg	61200
tgtctcccgt ttcacagatg agccccggg agctcactct agtagtggcc agagaggcct	61260
gggctcagg gagcggggca catttccaac aggacacacc gccctggtct gagtctcgtg	61320
ggtagtggga gcagaggaga gcgcctatg tctgtggggc ggcttggctg agcctggaag	61380
ccacctgacc tccccgtcc cttccctgcc aggcatcgca tgcggaaagt ccatgatgag	61440
ctccgtgagc ctgatggggg gccggggcgg ggtgcccctc tacgaccgga accacgtcac	61500
aggggcctcg tccagcagct cgtccagcac gaaggccacg ctgtaccgc cggtgagggg	61560
cggggccggg gaggggagg gcgggatggg gctgtggggc cctcccaccg tcagtgtggtg	61620
ccaccggagg cttcccgggt tccctggggc tgtgccaccg cctctgaggc atgcttgctt	61680
tcttccctt tcaaacctt ctgcttctt ctttaatgac attgttgatt gtggataatc	61740
tgaaaactac acaaaaatat aaagagccaa aatctcacc aaatccacct cctagagtgg	61800
ctgttgggct ccgtcagcat ccaggcggc gtctgtgttc cgcacggccc agcccatcga	61860
tagccgctg caccaggcct gtctgcccctc tgtgagcctc cccacagggt tccctccaca	61920
aacaccctgt tctcccacc agggctggct gcttctgga aaacagctgg atggtttgt	61980
gcatgacaga caaacacagg gtgattttcg tggctaaaat actccctgga gcttttggca	62040
gggtgagggg ctggctccag ctgagccacg ccttgagtga aatgactgtg aggagaataa	62100
actgccgctg cctccagga tcaactggggc tggctgggga gaacccccgt ttctgggagc	62160

acagtcaccag gatgccaaagg cgagcttggt gccgagatgt gaactcctga gtgtaaacag	62220
cgggggctga cttgacatgc tttgtatgct tttcatttgt tectgcagct gtatgcccct	62280
aaggtagagc cagccccctt ctgcttcctc tggggcctcg ccagtgagcc ccaccttgct	62340
ggggctgggt cctcctgccc ttctgggtat cctcacatc tggggctctg tcttcttggt	62400
ttatttttct ttttttttg agacggagtt tcaactttgt tgcccaggct tcagtgaat	62460
ggtgtgatct ctaggctcac cgcaacctct gcctcccagg ttcaagcagt tctcctgcct	62520
cagcctccct agtagctggg attacaggca tgtgccacca cggccagcta attttgtatt	62580
tttagtagag atggggtttc tccatgttgg tcaggctgat cttgaactcc ctacctcagg	62640
tgatccgccc accttggcct cccaaagtgc tgggattaca ggcgtgagcc accgcacctg	62700
gcctttttct tttcttttct tttctttttt ctgagacagg gtctcgtct gtcacccagg	62760
ctggagtga atggtgtcat catggctaac tgcagcctct accttctagg ctcaagcaat	62820
cctcccatct cagcccctaa gtagctagga ctgcacgcat gcaccccat gccagctaa	62880
tatttacatt tttttagag atgaagtttc actatattgc ccaggctggg ctccaactcc	62940
tggactogag cgatcctcct gcctcggcct cccaggtgc tgggattaca ggcgtgagcc	63000
accgtgcctg gcctggggta ttgtcttctt atggcacctg actgtggtgg gccctgggaa	63060
ggaagtagca gaagagggtt cttcttggtt tcttgacag taactgagtg ttctggaggc	63120
cccaggcct ggctttgttt agggacaaaag ggaactggta accagaagcc gagagttaa	63180
acacccactg ccttcttcc ctgctcctgc tgetgcaacc cagcttaacc agccaggagt	63240
gctaggaacc caagcagggc ccccgagcac acagcaggca gtcacgaat tctcttttcc	63300
tgttctccct tgggagctgg gaggatctta atcaggcaat aagagatggc actgagcagc	63360
cagctaattt tttaaatac tttattgttt aaccatatga ctcacccact taaaaagg	63420
tacagttcag tgggttttag tgtattcaca gatgtgtgca accctcacca cagttaattt	63480
tagaacattt tctgcccct aaaagaaact ctgcatgaag ccagctgttt ttaaattagc	63540
aaagttattt tgcaccttt aaatatatgt tcatgttaca aaattcaaaa gatacagaag	63600
agtctgcagt ccaaagagac tccgccccca tgacgccaag caggactccc tgggaggcat	63660
ggcctcctgc agtgtgttct ttctatgtcc cccaggggt catctgtaca tatgcaagca	63720
tacaagagcg tggactttgt tttccaagcc agaagataat tgtagattta tgtgcagttg	63780
tgagaaagag cacagacca tttatcctct gcctggtttc cccagtgct gcctgccatc	63840
ttgcatgact tccattccta tcataagcaa gacactgata acgattcttt caccttattc	63900

agattgacat aagtgttttt tgtttgttct tgagacaaac ttcctctgtc acccagtggg	63960
agtgcagtgg cacaatcaca gctcactgca gcctcaaact cctgggctca agegattctc	64020
ctgcctcagt cccctcaagt agctcagatg gcaggtgtgc accatcatgc caggctaatt	64080
tttaaatttt ttgtggaggt gaggcctcac taaatttctt gggctagtct tgaactcctg	64140
agctaaagtg atcctcctgc ctcagcctcc caaagtggta ggattacagg catgagccac	64200
tgcgcctggg ctgacatatg tgttttcgta agcccgaaag atagcatctg aagagtcaac	64260
attgagcctt gccttttgc tctaattgat tataaaagct gctgttctga gcatttcgga	64320
ggctcccagc tgccgtgtgc accctgccta gagctctacc gtaacccatc tccgggagga	64380
ggtgctattg ttttctcat tttgcaacaa ggaggctgaa gaactgagca tgaaccactg	64440
gcctgggtcg ttcggttggg aggcagtggg gccaggccat ccaactcaca accaccttct	64500
actctgettc ccccgacccc tgaagtttgt tctgttttga ggacacagcc gtcacattct	64560
tggtggctga acagcactcc ttgtcaggtg tggtcgggcc cccactggag ggcacatg	64620
tcctctctcc tgctgcggtt gaaccttggc tgtttcaacc actcctgcca agtggccctc	64680
tgaaagggac agtccatctt ttctcagcag agggccacac tggcaaaacg gtccctggca	64740
ccctttctct ccacctgtct aatatagagt aaaaatggta tcatgttaag atcttcattt	64800
atatttattt tatcatgaat gatgtaagca tcattttgtg tgtttaagaa cctttgggcc	64860
cagcgtgatg gcttgcagct gtaatctcag cacttttaga ggctgagatg agcggatcac	64920
ttgaggccgg gagtttgaga ccagcctggc caacatggag aaaccccgtc tctagtaaaa	64980
atttaaaaat tagccgggta tggatgatccc agctacttgg gagtctgaag catgagaatt	65040
gcttgaacat gggaggcgga ggttgcagtg agccgagatc gcgccattgc actccagcct	65100
gggagacaga gcgagactct gtctcacaaa aaaaaaaaaa aaagaaaaga aaagaaatta	65160
tcaatctcct cttttatggc atatatatat atatatatat atatatatat ttatttccct	65220
ttcttggtta tgttcataaa ggctcccct gctctgatca taaaaaaca cttattttca	65280
cactctctct cttttttttt tgagacagag ttttgctcct gttgccagg ctggagtgca	65340
gtggcgcaat ctcagctcac tgtaacctcc gcctccggg ttggagtgat tctcctgcct	65400
taccttcccg agtagctggg attataggca tgcaccacca tgctggcta atttgtact	65460
tttagtagag acgggggttt ctccatgtt gtcaggctgg tctcgaactc gcgacctcag	65520
gtgatccacc cacctcggcc tcccaaagt ctgggattac agacgtgagc caccatgcc	65580
agccacact ctctttctta acgtctcct ctttctgtt tacgttcaca tctttaattc	65640

ttctgggatg taattagatt tgatgagcaa ggtgggcatc cagcttggtt cttggctgat	65700
ggcttatggg tggcgtgaat tagtcggggg ctatcaggag gcagaaactc tatgagaatt	65760
tgaacagaga aagttccgtc tacaggctta ttaccaggga ctggaatagc agaaattgaa	65820
cagtgatgac tacagagaac tctaagaatg caggaatagg ccaggcatgg tggctcacac	65880
ctgtcatccc agcacttttg gagaccaagg cgggtggatc acctgaggtc aggagtcca	65940
gaccagcctg gccaacatag tgaaacccca tctctactaa aaatacaaaa aaattagctg	66000
ggtgtggtgg cgcattgctg taatcccagc ttctcgggag tctgaggctg gagaatcact	66060
tgaacctggg aggcagaggt tgtagtgagc cgagatcatg ccattgtact ccagcctggg	66120
caacaagagc gagactcagt caaaacaaca acaacgcagg aatagcagat gagccgaggt	66180
ggggcctccc cagccccac ccccccccc gcacctggg ccgagatcca gtccctcttg	66240
aatagggcct gggcgtggtt caccggacat ctgagacatt gccgaggcgc tgcactggtg	66300
gatcttgcca gaagtctgcc cagtgcagat ttgggcagaa tctcaaactg ccttgggatg	66360
taggagagaa accaggcctg gtcaagttca tgggaagagg tggaaacaga ccccataggc	66420
tggggcttgg gcagctgtag gaagccctct ctgctgctc cctgctgct ctctgcttg	66480
aagcatcttc cccagtgcc ccagtctcat gccctctcaa cgttggggtc aaatcctgag	66540
gaatacccag actggctctc tgggcccagg aggaccctct ccagaaagag caggggccag	66600
tgcggcttcc taaagggcag gggaagggcc tggccactcc ccagaggcta ctcaccagcc	66660
atcaggatag cccagggaag caggccttct cgagccatt ttattacttt attttattat	66720
tttatttaat tttaaattta ttttttgaga cagagtctca ctctgttgcc caggctggag	66780
tgcagtgggt cgatctcaac ccaactgcgc ctctgcctcc agggttcaag ggattctccc	66840
acctcagcct cccaagtagc tgggattaca ggtgcccgc accacaccg gctaattttc	66900
atatttttag tagagacgag gtttcacat gttggccagg ctggtctcga actcctgacc	66960
tcaagtgatc cggccgctc ggcctccaa agtgctaggt caagccatt ttaaagttga	67020
agaaactgag gctgaggtaa attccctccc cagggatcct gctgcagcca gaagggtgta	67080
aaacaggact tcaccgggt ctgtctggcg tgaaaggcag tgttcttgta ccaccctag	67140
gggcctgaga gaactgagc cctcgggcat aactgacagt tctgttccca ttattccgca	67200
ggggctcgga tctggctgta tgctttccag gatggccttg gagaccaca taagccctac	67260
accctttggg aagctgcat ttgggttggg gtgcgctcag tggcacttgt ggaagggtga	67320
gacctgtgtg ggtgtgtggg cccaggggcc ctggctccct cctccctttg tagggctggt	67380

tgtgtgctgc ctggacctgg ggggcacgtt cacgtggtga atttgtctat ttactatccc	67440
cgctttgggg ctggtgccag cacaggccct tgtgaagggg gtgcctttgt ctggagtggg	67500
actgtggccc ctccctcagc gtggtgactt ctgtgtcagg gcttcagcag ggacgcagag	67560
cccctgagtg ttcggaacaa gggcgtcatt gcaggagtta gactgtgtgt gatggagggg	67620
ggagggggcag gaggaaaggt cagaaggaga gttcctggga aggtccctga ggagcctggt	67680
gaggtgctaa ctggtgtgga ggacactcag ggcctgtggg gacatctcct actgctgggg	67740
gccagccaca aagggaactg gccgaagtcc tgtccccgcc ttcacagccc agcatctggt	67800
cacaaggcag gtacttgga gggcgcgggc acctgggcca aaagtgcctg ggttcccttt	67860
gcctttcact gagatgacct tcggggcagg tggtgtctgc ctccccctct gtccccaggt	67920
tttgccaact ggccagagga aggggtcctg ggaagcaggg gggccagaag ccctctctgc	67980
aaggaaagcc cgaggggtgt gggaggaagg aaggaatgcc caggctggcg aggtctctaa	68040
tcaccctggc ttggtctctc tcagatcctg aaccgcgcgc cctccccggc cacggacccc	68100
tcctgtaca acatggacat gttctactct tcaaaccattc cggccactgc gagaccgtac	68160
aggtaggaca tccctgcag ccctccatgg ccattgggtt cccgccagcc cgtggtggag	68220
gggcctaate cccatgccac tgatgagggg aggtattctg ggtgctagt ggcaggtgcc	68280
gggccagcc ctgcctcct ctgctctgcc aaccacacta ggctgcctcc ccagacaagc	68340
tcagcgggca ctgcatgttg ggttcagaaa tcagcagaac tccacgttct gagctgctct	68400
tcaagttgct cctatggggg ttacttttaa gctgggaaat ggctgtggcg tcgaggggcc	68460
gggggcttgg gctccaaact ctgactgtgt gtttgagtcc ggctgtggaa acctagccat	68520
tgagatgcc cctcttggtg gctctgtcct cttaggatgg gacaagtctg tgaaggctgc	68580
tgcagcacc accgtagacc cctaactgtg tgacgtcacc aggatggtcc gggctgctca	68640
cttgccacag tggcctgttt gagccccgga agccaacggg gctgctcagc tggacaccag	68700
ccccccgagc tgcccatgtt ggggtcacag gccccacct cctggttggg gaggggcaac	68760
tgagagtgtg gagaggtggg acccaggtgt gctggtctcc gcaggggctg gatcagagcc	68820
tgggatgggc aggggtgagc tcctgacct taaccagtg gtgtcaggca acgtggccca	68880
cccgccagcc gcaccaggcc ccacccccgc aggtgaaggg gtgggatagg ctgggcctgg	68940
gccaggacac ctctggacca cgcattcctc attgcttggg tccttgagc agcagggcct	69000
cccagtggtg gtgccgcctg ccacctagt gccatttcca cgaactccca ggccctggctg	69060
gggagccgga actgcagcct ccatttccac ccactccgg gtcgggccac ctccctgatg	69120

cctcagtatt	atatcaaact	gtcacagtct	gtcccacagc	cttacagacc	actgtctcca	69180
gaatggtcac	atccacactg	ggcagcccag	tctcgctagt	tccctcgccc	acctcctgcc	69240
tttgctcatg	cccgctctgc	tctggggcca	ccgcggacac	atcttcccc	cgcccgccgt	69300
ctgacctcac	agcagctggg	ccccaaagag	agtatcctgt	cctgctgcac	ttttctcaac	69360
acccggtggt	ggctgcacct	tcccacccat	tgcaggcccc	tctgtgacag	gacgggggct	69420
cctaaacaca	ccacagttcc	gagtctgaac	tcacacagtg	ggatgcggcg	tttctgggcc	69480
acagttgggt	gcaggtagcc	tctgggagga	tgggaggtca	ggagccatct	tgcgagtcag	69540
gttgcttgaa	ctcaggatgg	aagtgttccg	ggcccattgg	ttgctgtatt	agcctgttct	69600
cacgtgcta	ataaagacat	acccaagact	gggtaattgt	aaaggaaaga	ggtttaacgg	69660
actcacagtt	ccacctgcct	gggggtggcct	cacaatcatg	gtagaagaca	aggaggagca	69720
agtcacatct	tacatggctt	cagggaaacag	acagcatgag	aaccaagcga	aaggggtttc	69780
cccttgtaaa	accatcaagt	ctagtgaagt	ttattcacta	ccacgagaac	agtatggggg	69840
gaaccacccc	catgattcaa	tcattctcca	ctgggtccct	cccacagcac	gtgggaatta	69900
tgggagtaca	attcaagatg	agatttgggt	ggggacacag	ccaaacccta	tcggttgcca	69960
acatttacag	taacagtgtt	aggtgaacag	ttgtccagtc	tccctgtttg	tcggacactg	70020
tttctagcac	cttccaggca	gaatctcatg	tatccttcac	tttcgaaatg	ggtactatth	70080
catccccact	tttatcaatg	agaaaactaa	gctcgaagag	gtcaagtaag	ttcctggcca	70140
aggtcagcta	gcaggtctta	gaggcctcgt	tctccttaga	ggcagccttg	ccagggccca	70200
ggcttggcag	gctgcagggc	aggtgcgggc	atgcccatgg	tagaggtggg	accattgagg	70260
ctcagagagg	gtaagtgatg	agccctggcg	acacagcggg	gtgggtccag	agtccggcct	70320
gcatcttctg	gagctggcca	gtggacaggc	ctttcccggt	cacagccccg	gggctgctgt	70380
gcccaccagg	gcggatgtgc	ctaccgaatc	ccactcctct	gtgtgtgtcc	ctttcaggcc	70440
ctacatcatt	cgaggaatgg	cgcccccgac	gacgccttgc	agcaccgacg	tgtgtgacag	70500
cgactacagc	gccagccgct	ggaaggccag	caagtactac	ctggatttga	actcggactc	70560
agacccttat	ccacccccac	ccacgcccc	cagccagtac	ctgtcggcgg	aggacagctg	70620
cccgccctcg	cccgccaccg	agaggagcta	cttccatctc	ttcccgcgcc	ctccgtcccc	70680
ctgcacggac	tcattcctgac	ctcggccggg	ccactctggc	ttctctgtgc	ccctgtaaat	70740
agtttttaaa	atgaacaaa	aaaaaaatat	atthttatgat	ttaaaaaata	aatataattg	70800
ggatttttaa	aacatgagaa	atgtgaactg	tgatgggggtg	ggcagggctg	ggagaactth	70860

gtacagtgga gaaatattta taaacttaat tttgtaaaac agaactgcca ttcttttgtg 70920
 ccctgtgtgc atttgagttg tgtgtccccg tggaggggaat gccgaccccc ggaccaccat 70980
 gagagtccctc ctgcaccccg gcgtccctct gtccggctcc tgcaggggaag ggctggggcc 71040
 ttgggcagag gtggatatct cccctgggat gcatccctga gctgcaggcc gggccggctt 71100
 tatgtgcgtg tggcctgtgc cgtcagaaag ggccctgggc ttcacacgc tgttgctgtt 71160
 cgtcttctc agattcttag tctttttttt tttttttttt ttttgagacg gagtctttct 71220
 ctgtcatcca ggctggagtg cagtgggtaca atctcagctc actgcaagct ccgactccca 71280
 ggttcaagtg agtctcctgc ctcagcctcc cgagtagctg ggactacagg tgcgcgccac 71340
 cacacccgcc cagctaattt ttgtattttt agtagagatg gggtttcacc atgttggcc 71400
 ggatgatctc gatctcttga cctcgtgatc cggccacctc ggctcccaa agtgctggga 71460
 ttataggcat gagccactgt acccagctga ctcttagtca cttttaagaa ggggactgtg 71520
 ctttcatttt tcaactgggcc ctgcagaata tatgcctggg ctctgggctc ttctgaacct 71580
 gtgttggett ccatctgacc tctctgtgcc agcccaaggc tgctgctctt cctgagggca 71640
 aggagcccca tgactgcgtg ttgactcgtt ggatggggct gctgagccca ctctgccaca 71700
 ccacgtgccc ctggcaggga gggaatccct gggtcctcac aggaacagtc agcaagccac 71760
 acctgacgcc tgctgtgggc ccatccctgc ggtgctggag aagacagaca aggctggtc 71820
 actgcctctg cagggtcccc agtccgtgga aggagacagt aatctaggca ttttcggtgg 71880
 ggaagctgag ctgttctcgt gtccctgaagg ccaggcggga acagccgtct tcagagggaa 71940
 gggagaaaat gcacatcgca tcagtggaga agggcctgac ttccctcagc atggtggagg 72000
 gaggtcagaa aacagtcaag cttgagtatt ctatagtgtc acctaaata 72049

<210> 10

<211> 8705

<212> DNA

<213> Homo sapiens

<400> 10

ggactcaggg gcagcaggga ggtacacca tggtagtggt gcggaccata gggggtaatg 60
 agagggtgaa tcgatggaac ctgggggaca caatcgaagt ggttccagag tcgggctgta 120

ctaattaaag agacggggca gtggacaggc attttcagtt gactgcccag ggagtgttct 180
 gccaacacagg gaggatatgc gtacagaatc atactcgatc agcatgagtc caattcagac 240
 cgtacatcag tggagatatg ggtccccga tgactccgtg gaacactgat gtttgtgaca 300
 ggggagtaca gcaccagcca tcagcaggcc agtaaatcat accggcctgc gaaattggac 360
 tcagacccgg atccaccctg accgacgtcc caagccccca cccccaccc cccaccatgg 420
 gccgagatcc agtcctcttt gaatagggcc tggccgtggt tcacgggaca tctgagacat 480
 tgccgaggcg ctgcattggt ggatcttgcc agaagtttgc ccagtgcaga tttgggcaga 540
 atctcaaact gccttgggat gtaggagaga aaccaggcct ggtcaagttc atgggaagag 600
 gtggaaacag accccatagg ctggggcttg ggcagctgta ggaagccctc tctgctgcct 660
 ccctgcctgc tctctgcttt gaagcatctt cccagtgcc cccagtctca tgccctctca 720
 acgttggggg caaatcctga ggaataccca gactggctct ctggggccaa gaggaccctc 780
 tccagaaaga gcagggccca gtgcggcttc ctaaagggca ggggaagggc ctggccactc 840
 cccagaggct actcaccagc catcaggata gcccaggaa gcaggccttc tcgagcccat 900
 tttattactt tattttatta ttttatttaa ttttaaattt attttttgag acagagtctc 960
 actctgttgc ccaggctgga gtgcagtggg gcgatctcaa cccactgcag cctctgcctc 1020
 cagggttcaa gggattctcc cacctcagcc tcccaagtag ctgggattac aggtgcccgc 1080
 caccacaccc ggctaatttt catattttta gtagagatga ggtttcacca tgttggccag 1140
 gctggtctcg aactcctgac ctcaagtgat ccgcccgcct cggcctccca aagtgctagg 1200
 tcaagcccat tttaaagttg aagaaactga ggctgaggta aattccctcc ccagggatcc 1260
 tgctgcagcc agaaggtggt aaaacaggac ttcaccggg tctgtctggc gtgaaaggca 1320
 gtgttcttgt accaccctag ggggcctgag agaactgagt ccctcgggca taactgacag 1380
 ttctgttccc attattccgc aggggctcgg atctggctgt atgctttcca ggatggcctt 1440
 ggagaccac ataagcccta caccctttgg gaagctgcat gttgggttgg ggtgccgtca 1500
 gtggcacttg tggaagggtgc agacctgtgt ggggtgtgtg gcccagggcc cctggtcctt 1560
 tcctcccttt gtagggctgg ttgtgtgctg cctggacctg gggggcacgt tcacgtggtg 1620
 aatttgtcta tttactatcc ccgctttggg gctgggtgcca gcacaggccc ttgtgaaggg 1680
 ggtgcctttg tctggagtgg gactgtggcc cctccctcag cgtgggtgact tctgtgtcag 1740
 ggcttcagca gggacgcaga gcccctgagt gttcggaaaca agggcgtcat tgcaggagtt 1800
 agactgtgtg tgatggaggg aggaggggca ggaggaaagg tcagaaggag agttcctggg 1860

aaggtccctg aggagcctgg tgaggtgcta actggtgtgg aggacactca gggcctgtgg	1920
ggacatctcc tactgtctggg ggccagccac aaaggggaact ggccgaagtc ctgtccccgc	1980
cttcacagcc cagcatctgg tcacaaggca ggtacttgga agggcgcggg cacctggggc	2040
aaaagtgcct gggttccctt tgcctttcac tgagatgacc ttcggggcag gtggctgctg	2100
cctccccctc tgtccccagg ttttgccaac tggccagagg aaggggtcct gggaagcagg	2160
ggggccagaa gccctctctg caaggaaagc ccgaggggtg tgggaggaag gaaggaatgc	2220
ccaggtggc gaggtctaa gtcaccctgg cttggctctc ctcagatcct gaaccgcgcg	2280
ccctccccgg ccacggaccc ctccctgtac aacatggaca tgttctactc ttcaaacatt	2340
ccggccactg cgagaccgta caggtaggac atccctgca gccctccatg gccattgggt	2400
tcccgccagc ccgtggtgga ggggcctaata ccccatgcca ctgatgaggg gaggtattct	2460
gggtgctaata gggcaggtgc cgggcccagc cctgcctccc tctgctctgc caaccacact	2520
aggctgcctc cccagacaag ctcagcgggc actgcatgtt gggttcagaa atcagcagaa	2580
ctccacgttc tgagctgtc ttcaagttgc tcctatgggg gttactttta agctgggaaa	2640
tggctgtggc gtcgaggggc cgggggcttg ggctccagag tctgactgtg tgtttgagtc	2700
cggctgtgga aacctagcca ttgagatgcc ccctcttggt ggctctgtcc tcttaggatg	2760
ggacaagtct gtgaaggctg ctgcagcacc caccgtagac ccctaactgt gtgacgtcac	2820
caggatggtc cgggctgtc acttgccaca gtggcctgtt tgagcccggg aagccaacgg	2880
ggctgtcag ctggacacca gcccccgag ctgccatgt tggggtcaca ggccccacct	2940
ccctggttgg ggaggggcaa ctgagagtgt ggagaggtgg gaccaggtg tgctggtctc	3000
cgcaggggct ggatcagagc ctgggatggg cagggtgagc ctctgacct ttaaccagt	3060
ggtgtcaggc aacgtggccc acccgccagc cgcaccaggc cccacccccg caggtgaagg	3120
ggtgggatag gctgggcctg ggccaggaca cctctggacc acgcattcct cattgcttgg	3180
gtccctggag cagcaggggc tccgagtgt ggtgccgcct gccacctagt ggccatttcc	3240
acgaactccc aggcctggct ggggagccgg aactgcagcc tccatttcca cccactccg	3300
ggtcgggcca cctccctgat gcctcagtat tatatcaaac tgtcacagtc tgtcccacag	3360
ccttacagac cactgtctcc agaatggta catccacact gggcagccca gtctcgctag	3420
ttcctcgctc cactcctgc ctttgtcat gccgctcctg ctctggggcc accgcggaca	3480
catcttcccc ccgcccgcg tetgacctca cagcagctgg gcccgaagag gagtatcctg	3540
tcctgctgca cttttctcaa caccgggtgt tggctgcacc ttcccacca ttgcaggccc	3600

ctctgtgaca ggacgggggc tcctaaacac accacagttc cgagtctgaa ctcacacagt	3660
gggatgcggc gtttctgggc cacagttggg tgcaggtagc ctctgggagg atgggaggtc	3720
aggagccatc ttgcgagtca gggtgcttga actcaggatg gaagtgttcc gggcccatg	3780
gttgctgtat tagcctgttc tcacgtgct aataaagaca tacccaagac tgggtaattg	3840
taaaggaaag aggtttaacg gactcacagt tccacctgcc tgggggtggc tcacaatcat	3900
ggtagaagac aaggaggagc aagtcacatc ttacatggct tcagggaaca gacagcatga	3960
gaaccaagcg aaaggggttt ccccttgtaa aaccatcaag tctagtgaga ttatttact	4020
accacgagaa cagtatgggg ggaaccaccc ccatgattca atcatctccc actgggtccc	4080
tcccacagca cgtgggaatt atgggagtag aattcaagat gagatttggg tggggacaca	4140
gccaaacct atcggttgcc aacatttaca gtaacagtgt taggtgaaca gttgtccagt	4200
ctcctgtttt gtcggacact gtttctagca ccttccaggc agaattctcat gtatccttca	4260
ctttcgaaat gggactatt tcattccccac ttttatcaat gagaaactaa agctcgaaga	4320
gggtcaagtaa gttcctggcc aaggteagct agcaggctct agaggcctcg ttctccttag	4380
aggcagcctt gccagggccc aggcttgcca ggctgcaggg cagggtcggg catgcccatg	4440
gtagagggtg gaccattgag gctcagagag ggtaagtgat gagccctggc gacacagcgg	4500
gggtgggtcca gagtccggcc tgcattcttct ggagctggcc agtggacagg cctttcccgt	4560
tcacagcccc ggggctgctg tgcccaccag ggcggatgtg cctaccgaat cccactcctc	4620
tgtgtgtgtc cctttcaggc cctacatcat tcgaggaatg gcgccccga cgacgccctg	4680
cagcaccgac gtgtgtgaca gcgactacag cgccagccgc tggaaggcca gcaagtacta	4740
cctggatttg aactcggact cagacccta tccaccccca cccacgcccc acagccagta	4800
cctgtcggcg gaggacagt gccgccttc gccgcacc gagaggagct acttccatct	4860
cttcccgc cctccgtccc cctgcacgga ctcatcctga cctcggccgg gccactctgg	4920
cttctctgtg cccctgtaaa tagtttttaa tatgaacaaa gaaaaaata tattttatga	4980
tttaaaaaat aaatataatt gggattttta aaacatgaga aatgtgaact gtgatgggg	5040
gggcagggtt gggagaactt tgtacagtgg agaaatattt ataaacttaa ttttgtaaaa	5100
cagaactgcc attctttcgt gccctgtgtg catttgagtt gtgtgtcccc gtggagggaa	5160
tgccgacccc cggaccacca tgagagtcct cctgcacccg ggcgtccctc tgtccggctc	5220
ctgcagggaa gggctggggc cttgggcaga ggtggatatt tcccctggga tgcatccctg	5280
agctgcaggc cgggccggct ttatgtgcgt gtggcctgtg ccgtcagaaa gggccctggg	5340

cttcatcag ctgttgetgt tegtcttct cagattctta gtcttttttt ttttttttt	5400
ttttttgaga cggagtcttt ctctgtcatc caggetggag tgcagtggta caatctcagc	5460
tcaactgcaag ctccgactcc caggttcaag tgagtctctt gcctcagcct cccgagtagc	5520
tgggactaca ggtgcgcgcc accacacccg cccagctaat ttttgatatt ttagtagaga	5580
tggggtttca ccatgttggc caggatgac tcgatctctt gacctcgtga tccgccacc	5640
tccgcctccc aaagtgtgg gattatagc atgagccact gtaccagct gactcttagt	5700
cacttttaag aaggggactg tgccttcatt tttactggg cctgcagaa tatatgcctg	5760
ggctctgggc tcttctgaac ctgtgttggc ttccatctga cctctctgtg ccagcccaag	5820
gctgctgctc ttctgaggg caaggagccc catgactgcg tgttgactcg ctggatggg	5880
ctgctgagcc cactctgcca caccacgtgc cctggcagg gagggaaatcc ctgggtcctc	5940
acaggaacag tcagcaagcc acacctgacg cctgctgtgg gccatccct gcggtgctgg	6000
agaagacaga caaggcctgg tcaactgctc tgcagggtcc ccagtccgtg gaaggagaca	6060
gtaatctagg cattttcggg ggggaagctg agctgttctc gtgtcctgaa ggccaggcgg	6120
gaacagccgt cttcagaggg aaggagaaaa atgcacatcg catcagtgga gaagggcctg	6180
acttccctca gcatggtgga gggaggctcag aaaacagtca agcttgttgc tgggtgacag	6240
tgcatttaat aatcaaaaata taggctgggt acggtggctc atgcctgtaa tcccagcact	6300
ttgggaggct gaggcagggt gatcacttga ggccaggagt ttgagaccgg cctggccaac	6360
atggcaaaac ctcaactact aaaatacaaa aactagccgg gcgtgggtgt gcacgcctgt	6420
aatcccagct acttgggagg ctgaggcagg agaattgctt gaacctggga ggcggaggct	6480
gcagtgagcc gagattgtgc cactgcactc cagcctgggc aacagagcaa gactctgtct	6540
caaaaaaaaa aaaaaaaaaa gcaatacaaa atacaaatat cactttcact aaaagaagg	6600
atggaagacc caaaacaaac agaaaacaac aaaatggcag gagtaagtcc ccacttatca	6660
ataataacat tgactgtaaa taggctaagc tctgcaatca aaagagtggg ccaggagcgg	6720
tggctcacgc ctgtaattcc aacgctttgg gaggtgagg cggatggatc atttgatgtc	6780
acgagtttta agaccagcct ggccaacaag gtgaaacccc atctgtacta aaaatacaaa	6840
aattagccag gcggtagtgg cacgcacctg taatcccagc tacttgtgag gctgaggcag	6900
gagaatcact ggaggctggg aagcggagggt tgctgtgagc caagatggag ccactgcact	6960
cccacctggg cgacagagtg agatcctgtc ttaagaaaaa aaagagtgga tgaatggatc	7020
aaaaaacaag acccaaccat ctcttgcata caagaaacac actttaccta taaaaacaca	7080

ctaggccagg	tgtggtggct	cacacctgta	atcccagccc	tttgggaggc	ctgactggca	7140
gatcacctga	ggccaggagt	ttcagaccag	cttgaccgac	atggcaaaac	cccatctctc	7200
ctaaaaatac	aaaaaaacaa	aaaaaagaaa	aaggctggaa	gtagtgatgt	gtgcctgtag	7260
ccccagctac	ttgggaggct	gaggcaggag	aattgcttga	atccgggaag	tggaggttgc	7320
agtgagccag	gatggtgcc	ctgcactcca	gcctgggtga	cagagcgaga	ccctgtcata	7380
aaaaaaaaaa	gaaaagaaaa	gaaaaacgag	aaaaacaaac	acaaaattag	tagaagaaaa	7440
gaaataataa	agatcagaac	aggccaggct	catgggcaca	gtggctcaac	tcctacctgc	7500
tcaggagttt	gagaccagtc	tggccaacat	ggcaaaaccc	catctctcct	aaaaatatga	7560
aaaaaaaaaa	ataggctgga	tgtggtgatg	tgtgtgtgcc	tgtagcccca	gctacttggg	7620
aggctgaggt	gggagaatca	cttgagccca	ggaagtggag	gctgcagcga	gtcatgaatg	7680
caccctgcac	tctagctggg	taactggagt	gagattctgt	ctcaaaaaag	caaagaccag	7740
agcagaaata	aatgaaatgg	aatgaagga	aacaatgcaa	aatgatacaa	aaagtttttt	7800
cgaaaagata	aacaaaatca	acaaaccttt	agccagatta	agaaaaaaag	agagaagacc	7860
caaataaata	aaatccgaga	ttaaaaagga	gacattacca	ctgataccac	agaaattcaa	7920
aggatcatta	gaggcaacta	tgtgcaacta	tatgctaata	aactggaaaa	cctagaagaa	7980
ctgggtaaat	ttctagacac	atacaacct	tcaagattga	accatgaaga	aatccaaaac	8040
ctgaacaggc	cgggcacggg	ggcttacgcc	tgtaatccca	gcactttgga	aggcctgaga	8100
tcaggagttc	gagaccagcc	tggccaacat	ggtgaaaccc	catctctact	gaaaaaatat	8160
aaaaattagc	cgggcgtggg	ggcgggtgcc	tctaattgtc	gccactcggg	aggctgaggc	8220
aggaaaatca	cttgaacctg	ggaggcatag	gttgacgaga	gccgaggttg	caccactgca	8280
ctccagcctt	ggcgacagag	ccagactcca	tctcaaaaaa	attaaaataa	caaaaacctg	8340
aacagaccaa	taacaagtaa	tgcgatgaaa	actgtaataa	aatgtttccc	aacaaagaaa	8400
gcccaggaac	aaatggcttc	actgctgaat	tttaccaaac	attttttttt	ttttgagacg	8460
gagtctcgct	ctgtcgccca	ggctggagtg	cagtgggtga	acctcggttc	gctggtaact	8520
tatgcctctc	aggctgcaag	tgattttcct	gcttcaggcc	ccccgagtgg	ctggaaatta	8580
gatggtactt	gtcaaacaag	gcctggctaa	atttctatat	ttccttcaag	tagaagatgt	8640
gcttccaaca	aagggttggg	tacggctggc	ttctgaaaat	cttggatttc	aaggctcccc	8700
aaaag						8705

<210> 11

<211> 66933

<212> DNA

<213> Homo sapiens

<400> 11

tataatcaag	cgcggtccgt	ccagtcgggt	gggaagattt	tcgatatgct	tcgtgatctg	60
ctcaagaacg	ttgatcttaa	agggttcgag	cctgatgtac	gtattttgct	taccaaatac	120
agcaatagta	atggctctca	gtccccgtgg	atggaggagc	aaattcggga	tgcctgggga	180
agcatggttc	taaaaaatgt	tgtacgtgaa	acggatgaag	ttggtaaagg	tcagatccgg	240
atgagaactg	tttttgaaca	ggccattgat	caacgctctt	caactgggtc	ctggagaaat	300
gctctttcta	tttgggaacc	tgtctgcaat	gaaattttcg	atcgtctgat	taaaccacgc	360
tgggagatta	gataatgaag	cgtgcgcctg	ttattccaaa	acatacgctc	aataactcaac	420
cgggtgaaga	tacttcgtta	tcgacaccag	ctgccccgat	ggtaggattcg	ttaattgcgc	480
gcgtaggagt	aatggctcgc	ggtaatgcca	ttactttgcc	tgtatgtggt	cgggatgtga	540
agtttactct	tgaagtgtc	cggggtgata	gtgttgagaa	gacctctcgg	gtatggtcag	600
gtaatgaacg	tgaccaggag	ctgcttactg	aggacgcact	ggatgatctc	atcccttctt	660
ttctactgac	tgggtcaacag	acaccggcgt	tcggtcgaag	agtatctggt	gtcatagaaa	720
ttgccgatgg	gagtcgccgt	cgtaaagctg	ctgcacttac	cgaaagtgat	tatcgtgttc	780
tggttggcga	gctggatgat	gagcagatgg	ctgcattatc	cagattgggt	aacgattatc	840
gccaacaacg	tgcttatgaa	cgtggtcagc	gttatgcaag	ccgattgcag	aatgaatttg	900
ctggaaatat	ttctgcgctg	gctgatgcgg	aaaatatattc	acgtaagatt	attaccgcgt	960
gtatcaacac	cgccaaattg	cctaaatcag	ttgttgctct	tttttctcac	cccgggtgaac	1020
tatctgcccc	gtcagggtgat	gcacttcaaa	aagcctttac	agataaagag	gaattactta	1080
agcagcaggc	atctaaccct	catgagcaga	aaaaagctgg	ggatgatattt	gaagctgaag	1140
aagttatcac	tcttttaact	tctgtgctta	aaacgtcatc	tgcataaaga	actagtttaa	1200
gctcagcaca	tcagtttgct	cctggagcga	cagtattgta	taagggcgat	aaaatgggtc	1260
ttaacctgga	caggtctcgt	gttccaactg	agtgtataga	gaaaattgag	gccattctta	1320
aggaacttga	aaagccagca	ccctgatgcg	accacgtttt	agtctacgtt	tatctgtctt	1380

tacttaatgt cctttgttac aggccagaaa gcataactgg cctgaatatt ctctctgggc	1440
ccactgttcc acttgatcgc tcggtctgat aatcagactg ggaccacggt cccactcgtg	1500
tcgtcgggtct gattattagt ctgggaccac ggtccactc gtatcgtcgg tctgattatt	1560
agtctgggac cacgggtccca ctcgtatcgt cgggtctgata atcagactgg gaccacggtc	1620
ccactcgtat cgtcgggtctg attattagtc tgggaccatg gtccactcgt tatcgtcgg	1680
ctgattatta gtctgggacc acgggtccac tcgtatcgtc ggtctgatta ttagtctgga	1740
accacgggtcc cactcgtatc gtccgtctga ttattagtct gggaccacgg tccactcgt	1800
atcgtcggtc tgattattag tctgggacca cgatccact cgtgttgctg gtctgattat	1860
cgggtctggga ccacgggtccc acttgatttg tcgatcagac tatcagcgtg agactacgat	1920
tccatcaatg cctgtcaagg gcaagtattg acatgctgc gtaacctgta gaacggagta	1980
acctcgggtgt gcggttgat gcctgctgtg gattgctgct gtgtcctgct tatccacaac	2040
atcttgcgca cgggttatgtg gacaaaatac ctggttacc aggccgtgcc ggcacgttaa	2100
ccgggctgca tccgatgcaa gtgtgctgct gtcgacgagc tcgagagctc ggacatgagg	2160
ttgccccgta ttcagtgtcg ctgatttgta ttgtctgaag ttgtttttac gttaagttga	2220
tgcagatcaa ttaatacgat acctgcgtca taattgatta tttgacgtgg tttgatggcc	2280
tccacgcacg ttgtgatatg tagatgataa tcattatcac tttacgggtc ctttccgggtg	2340
atccgacagg ttacggggcg gcgacctcgc gggttttcgc tatttatgaa aattttccgg	2400
tttaaggcgt ttccgttctt ctctgcata acttaatgtt tttatttaaa ataccctctg	2460
aaaagaaagg aaacgacagg tgctgaaagc gagctttttg gcctctgtcg tttcctttct	2520
ctgtttttgt ccgtggaatg aacaatggaa gtccgagctc atcgctaata acttcgtata	2580
gcatacatta tacgaagtta tattcgatgc ggccgcaagg ggttcgctc agcgggtgtt	2640
ggcgggtgtc ggggctggct taactatgcg gcacagagc agattgtact gagagtgcac	2700
catatgcggg gtgaaatacc gcacagatgc gtaaggagaa aataccgcat caggcgccat	2760
tcgccattca ggctgcgcaa ctgttgggaa gggcgatcgg tcggggcctc ttcgctatta	2820
cgccagctgg cgaaaggggg atgtgctgca aggcgattaa gttgggtaac gccagggttt	2880
tcccagtcac gacgttgtaa aacgacggcc agtgaattgt aatacgactc actatagggc	2940
gaattcgagc tcggtaccgc gggatcctct agagtcgacc tgcaggcatg caagcttctc	3000
ttgtgccggg tgtacgctgt caggtcacac tggtagtga ggcagggcac agatgccag	3060
agcagagggg actttccttg gggattcaac acgtgcaagt cttaggggct ggcaaactct	3120

gccctcagct agagaggggg cttttatttg agaccagaat cacctgagca tcctcctgtc 3180
 cccagctgtg tccagcctgt ctgcaggac atcctgagag gaccaggctc tccccctatc 3240
 cacctgccta agtgccactc tgaaccctgt ccacctgtgc cgtggagggg cgtgacctca 3300
 agctgctcag ccagcagcag gcttgccctt ggggggcagc agagaccag gtggctgtgg 3360
 ggtgggtgct tcgtggcgtg gttctgaaac ttcgttgga gtgtgtggac agtgccttgc 3420
 ctgttctctg tgggacctta tttagaaacg aggtctgagt tactgggggt catcactgtg 3480
 ttctgatggc ccagctgtgt ggaggccgcg gtgcagcccc atccaaggag ccagggccct 3540
 gggctctagc gtgaccagaa tgcattgccc ggaggtgttt ctcatctcgc acctgtgttg 3600
 cctgggtgtg caagtggctg tgaactctg tgtagctct tgggtgttct gaaagtgcc 3660
 ccgggtctca ggctcagaa ccagggttct ccttcatctc ggtggcctgg gagcatctgg 3720
 gcagttgagc aaagagggcg attcacttga aggatgtgtc tggccctgcc taggagcccc 3780
 ccggcacggg gctggggcct gaagctgcc tcgggtgggt gagaggagg agcgatgaag 3840
 tggcgtcgag ctgggcagga agggtagacc cctgcaagg gggcatgctg gggacgtga 3900
 gcagcatggc cagcagctgg gtctgcagcc tggtagcccg cgggacttgt ggttggggct 3960
 ggtttgtggc caggagaggg gctggcagga gacaagggg actgtgaggc agtcccacc 4020
 cagcagctga agcccaatgg cctggctgtg tggtctcag ctgctgcat aacctctcag 4080
 tgcttcagtt ctctcatttg taaaatgagg aaacaaacag tgccagctc ccagaggtgt 4140
 catgaggatg aacgagtgc catgtagcat gggctgggtg cgtgtcacct aacatcacca 4200
 gcctttgcaa ggagagccct gggggcctgg ctgagtattt cccttgcccg gccaccccca 4260
 ggcctagact tgtgcctgct gcaggccctt gaccctgac ccattgcac ctgtctccac 4320
 aggagccgag gaggtgctgc tgctggccc gggacggac ctacggagga tctcgctgga 4380
 cacgccggac ttcaccgaca tcgtgctgca ggtggacgac atccggcacg ccattgccat 4440
 cgactacgac ccgctagagg gctatgtcta ctggacagat gacgaggtgc gggccatccg 4500
 cagggcgtag ctggacgggt ctggggcgca gacgtggtc aacaccgaga tcaacgacct 4560
 cgatggcatc gcggtcgact ggggtggccc aaacctctac tggaccgaca cgggcacgga 4620
 ccgcatcgag gtgacgcgcc tcaacggcac ctcccgaag atcctggtgt cggaggacct 4680
 ggacgagccc cgagccatcg cactgcaccc cgtgatgggg taagacgggc gggggctggg 4740
 gcctggagcc agggccaggc caagcacagg cgagaggag attgacctgg acctgtcatt 4800
 ctgggacact gtcttgcac agaaccgga ggagggttg ttaaacacc ggcagctggg 4860

ccccccccc agagcgggtga ttcaggagct ccagggcggg gctgaagact tgggtttcta 4920
 acaagcacc cagtgggtccg gtgctgctgc tgggtccatg cgtagaaagc cctggagacc 4980
 tggaggggagc cctttgttcc cctggcttca gtttctcat ctgtagaatg gaacgggtcca 5040
 tctgggtgat ttccaggatg acagtagtga cagtaagggc agcctctgtg aactgacca 5100
 cagtacaggc caggcctctt tttttctttt ttttttttg agatggagtc tctctgtc 5160
 gccaggtg gagtgagtg gtgtgatctc agctcactac aacctctgcc tctgggctc 5220
 aagtgattct cctgctcag cctcctgagt agctgggatt acaggtgcct gccactgtgc 5280
 ttggctaag tttgtattt tggtagagat ggggtttcac cgtcttgcc aggtggctg 5340
 caaactctg acctcaggtg atccacctgc ctacgctcc caaagtgtg ggattacagg 5400
 catgagccac cagcccggt cagggcaggc ctcttttgaa cactttgcac accatgggtc 5460
 ttttcatcca ggggggtagg tacagttgta cagttgagga cactgaagcc cagagaggct 5520
 cagggacttg cccaggtca cacagcagga tgtggcaggt gtggggctgg gcctggcagc 5580
 gtggctccag ctttccagca tagaaatctg tgaaagcaga tagtttgcg gtcggtaggg 5640
 gagactttct gagaccgcc ccagcggctc agagggtagt agccaggggc cttcctggg 5700
 gctcataacc cagaacactg aatgggaaaa ccctgatgga ggagggcag tggagctgtg 5760
 ggtgccgatg ggaagtccca gaggagctgg gaggtcagta gcgtgctgc cctctgtgga 5820
 gcacttagtg ggcaccaggt gtgtttccag gttcatggcc ctgggacctg aagctcagaa 5880
 ggtgaagtaa cttgccagg gcacctgctg ggcagcggcg ggcagaggat ttgtgggctg 5940
 tggagcctgt gctcgtggcc cagccctggg ggtgtgagt gtgctggccg gggagctttt 6000
 cctgcaagtg gactggtgtc taggagccag catgtcaggc agcaggcagc gggagtgcag 6060
 caggcagcgg gagcacagca ggcagagggc ggggctcag cagccatccg tggaccctgg 6120
 ggcacggagg catgtgggag agggctgctc catggcagtg gctgaagggc tgggttgtgc 6180
 cccgaggagg gtggatgagg gtaagaagtg ggggtcccag gggcttttagc aagaggaggc 6240
 ccaggaactg gttgccagct acagtgaagg gaacacggcc ctgaggtcag gagcttggtc 6300
 aagtcactgt ctacatgggc ctgggtgtcc tcatctgtga aaaaggaagg gatggggaag 6360
 ctgactccaa ggccctcct agccctggtt tcatgagtct gaggatccca gggacatggg 6420
 cttggcagtc tgacctgtga ggtcgtgggg tccagggagg ggcaccgagc tgggaagcggg 6480
 aggcagaggg gctggccggc tgggtcagac acagtgaag cagaggctgt gacttggggc 6540
 ctcagaacct tcaccctga gctgccacc caggatctgg gttccctcct tggggggccc 6600

cagggaaaca gtcacctgtc ctttgcata gggagccctt cagctatgtg cagaagggtc	6660
tgctctgecc ctctctccct ctaggtgtgc agctcctcca gccactagt cagatgtgag	6720
gctgccccag accctgggca gggtcatttc tgtccactga cctttgggat gggagatgag	6780
ctcttgcccc ctgagagtc aagggctggt gtggtgaaac ccgcacaggg tggaagtggg	6840
catccctgtc ccaggggagc cccagggac tctggtcact gggcttgccg ctggcatgct	6900
cagtcctcca gcacttactg acaccagcat ctactgacac caacatttac aaacaccgac	6960
attgaccgac accgacattt accgacactg acatttacca aactgttta ccaacactga	7020
catctactga cactggcatc taccaacact gacatttacc gacactgaca ttaccaaca	7080
ctatttacca aactgacat ctactgacat tggcatctac caacaccaac atttaccgac	7140
accaacattt accaactg aaatttaccg acaccgacat ttaccgacac cgtttacca	7200
caccgacgtt taccgacacc gacatttacc gacactgata ttaccaaca ctgacatcta	7260
ctgacgtggt catctactga caccgatgcc agcatctacc aacaccgaca ttaccaaca	7320
ctgacattta ctgacactga tatctactga cactggcatc tactgacacc aacatttacc	7380
aacaccagca tctaccaaca ccgacattta ccaacaccag catttacca caccgatgtt	7440
taccaacgcc gacgtttacc gacgccagca tctaccaaca ctgacattta ccgacaccga	7500
catttacga cactgacatt tactgacact gacatctact gatactggca tctaccgaca	7560
ctgatattta ccaacgccag catctactga cactgatgtt taccaacacc gacatttacg	7620
agcaccgaca ttactgaca ccaatattta ctgacatcaa catttagcca tgtgatggg	7680
gccggttggt gggcaggcct tgctcttggt actggggatg ctgcagagac cagacagact	7740
catgggggtca tggacttctg cttcttctcc agcctcatgt actggacaga ctggggagag	7800
aaccctaaaa tcgagtgtgc caacttggat gggcaggagc ggcgtgtgct ggtcaatgcc	7860
tcctcgggt ggcccaacgg cctggccctg gacctgcagg aggggaagct ctactgggga	7920
gacccaaga cagacaagat cgaggtagg ctctgtgga catgtttgat ccaggaggcc	7980
aggcccagcc acccctgca gccagatgta cgtattggcg aggcaccgat gggtgccgt	8040
gctctgctat ttggccacat ggaatgctt agaaaatagt tacaatactt tctgacaaaa	8100
acgccttgag agggtagcgc tatacaacgt cctgtggtta cgtaagatgt tatcattcgg	8160
ccaggtgcct gtagacacag ctacttgag actgaggtgg gaggatcgct ggagtccaag	8220
agtttgaggc cagccgggc aaaggggaca caggaatcct ctgcactgct tttgccactt	8280
actgtgagat ttaaattatt tcacaataca aaattaagac aaaaagttaa tcacatatcc	8340

actgccctgc ttaagacaga aaacatgggt gttgttgaag ccagaggcag ctgctggcct	8400
gagtttggtg attggttccct aagcagttga aggcagtttt gtttttccat agatgtctgt	8460
tctccctttg ctgggtgcag cctcgccctg ctgctgtggt cgggtttcag tggcctcgtc	8520
ccgtggacgc agcctcgccc tgcgctgtg gtcgggtttc agtggcctcg tcccgtagac	8580
gcagcctcgc cctgctgtg tggcgggtt tcagtggcct cgtcccgtgg acgcagcctc	8640
gcctgcgc tgtggtcggg ttccagtggc ctgctcccgt ggacgcagcc tcgccctgcc	8700
gctgtggtcg ggtttcagtg gcctcgctcc atgggcgtgc tttggcagct tttgtctcac	8760
ctgtggagcc tctcttgagc tttttgttt gttgtttgtt tttgtttgat tttgtttgat	8820
tgtttgtttt tgtgtctggt gttgttgccc aggcaggagt gcagtggcgc gatctcagct	8880
cactgaaacc tctgcctcct tgggttcatt ccattctcct gcctcagcct cccacatagc	8940
tgggattaca agtgcctgcc accacgctg gctaaatttt gtatttttag tagacagggg	9000
gtttcaccat gttggtcagg ctggtctgga actcctggtc tcacatgac cacctgcctc	9060
ggcctcccaa agtgttgga ttacaggcgt gagccaccgc gccagcctc tgttgagcat	9120
attttgaggt tctcttggtg ccagtgatat gtacatgtgt ccccatcgca ccctcgtcac	9180
ccattgaggt gacattggtg cctctcctcg ggggtgatgc ctccctctgt ttccagcaac	9240
ttctgaagga tttcctgag ctgcatcagt ccttgttgac gtcaccatcg gggtcacctt	9300
tgtctcctc agggctccca ggggaggccc gaatcaggca gcttgaggg cagggcagga	9360
tggagaacac gagtgtgtgt ctgtgttgca ggatttcaga ccctgcttct gagcgggagg	9420
agtctcagca ccttcagggt ggggaaccca gggatggggg aggcagagt gacgcccttc	9480
ccacgaaaac ctaggagct gcagggtgtg ccatttctcg ctggagctcc ttgtaaatgt	9540
tttgtttttg gcaaggccca tgtttgcggg ccgctgagga tgatttgct tcacgcatcc	9600
ccgctacccg tgggagcagg tcagggactc gcgtgtctgt ggcacaccag gcctgtgaca	9660
ggcgttggtc catgtactgt ctgagcagt gttttcttga gacagggtct cgctcgctca	9720
cccaggcgag agtgcagtgg cgcaatcac gctcgctgta gcctcaatct ccctgggctc	9780
aggtgatcct cctgcctcac cctctgagta gctgggacta cagacacata ccaccacacc	9840
cagctagttt ttgtgtattt tttgtggggg gagatggggg ttcgctgtgg tgcccaagct	9900
gatctcaaac tctgaggca caagcagctc acctgcctcg gcctcccaa gtgctgggat	9960
gacaggcacc agccgtcaca cgcagctcaa tgattttatt gtggtaaaat aaacatagca	10020
caaaattgat gattttaacc attttaagt gaacagttca ggctgggcgt ggtggcttat	10080

gcttgtaatc ccagtacttt gagaggctga ggtgggcaga tcacctgagg tcaggagttt	10140
gagaccagcc tggccaacat gatgaaatcc agtctctact aaaaatacaa aaattagccg	10200
ggcatggtgg caggtgcctg taatcccagc tactcgggag gctgaggcag gagaatcgct	10260
tgagcccggg aggtggaggt tgcagtgate tgagatcatg ccactgcact ccaatctgtg	10320
tgacagagca agactctgtc ttgaaaaata aataaataaa aaaaatttta aaaagtgaac	10380
aattcagggc atttagtatg aggacaatgt ggtgcaggta tctctgctac tatctacttc	10440
tagaacactt tcttctgccc tgaaggaaac cccatgccc aaggcactca cggccattct	10500
cccctctctc ccagcctctg tcaaccacta atctactttc tgtctctggg ggttcacttc	10560
ttctggacgt tttgtgtgac tggaatcctg caatatgtgg tccttgcgtg tggcttcttt	10620
ccatagcatt gtgttttcca gattcaccca cacattgtcg cacgttatca gaatctcatt	10680
cctgactggg tgcagtgggt taggcctgta atcctaacat tctgggaggc caaggcggga	10740
cgatcacttg aggcaggagt ttgagaccag cctggccagc ctagcaagac ccagctacc	10800
aaaaaat tttt aaaagttaac tgaacgtggt ggtgggtggc acttgtggtt ccagctacc	10860
tgggaggctg aggtgggagg atcgcttaag ccaggaggt caaggctgca gtgagctatg	10920
atcgaccac tgcactccag cctggacaac agagcaagac cctgtctgaa aaaaaaaca	10980
aaaaaaaaag ttcctttctt tttgtggctg gatgacatcc cattgtatgg ccacagcaca	11040
ttttgtttgt ctgtttatcg ggtgggtggc agtgggttcc accttttgtc tctgtgaat	11100
aatgctgctg tgaacatttg aattcaagtt tttgtttgaa cacctgttgt gaattatttg	11160
gatatatgtg taggggtagg attgctgagt cctatggtaa tgtaggttt gacttactga	11220
ggaaccatta aactgttttc aacagtggct ggcgcgttct gcatccccac cggcagtgtg	11280
tgagggttct gactttacct cctcacaac gcttcttttc catttaaaaa aatattcagc	11340
caggtgctct ggctcacgcc tgtaatocca gcactttggg aggccgtggc gggcggatca	11400
cctgagggtca ggagttcgag acgagcctgg ccaacatggt gtaaccccat ctctacaaa	11460
aatataaaaa ttagccgggt gtggcagcgg ggcctgttaa tcccagctac ttgggaggct	11520
gaggcaggag aatcacttga acccgggagg cagaggttgc agtgagccaa gatcgcgcca	11580
ctacactcca gcctgggtga caagagtga actccatcta aaataaaaca aaaataaaaa	11640
taaataaaaa tttattaaaa cattcatcac agccagccta gtgggtgtcc catgtggctt	11700
tgctcgcgat ttccctgata actaggatgc tgagcgtctt gtcccaggct tgccacacct	11760
cagcactttg agatacgtcg cacagtcccc atttgcgaac gagaaatgag gtttagggaa	11820

cagcagctgt	gtcatgtcac	acagcgagca	gggggtctct	gagccgtctg	acccacagc	11880
cgaccaagct	ccaatcctta	ccgcctccta	gtgttggtga	tgtagcccag	gggtgtccca	11940
catttttcag	atgagaacac	cgaagctcaa	aacaggagcg	ttttgtccac	attggataca	12000
cgatgtctgt	ggtttggtcc	tgaagtcact	ttatatctca	gtgggtccaga	ctggagtagg	12060
acaggggggt	ctggggaatg	gggaagggtg	ctcaggtgaa	aggaaggaat	tccagattct	12120
ccatactgtc	cttggaagt	tagaagactc	agagggtctg	gcaaagtcag	acaaagcaag	12180
agaaatgcag	tcaggaggaa	gcggagctgt	ccaggaacag	gggggtcgca	ggagctcacc	12240
cccaggaact	acacttgctg	gggccttcgt	gtcacaatga	cgtaggact	gcgtgttgat	12300
taccactttt	tttttttttt	ttgagggtga	gtctcgctct	cttgcccagt	ctggagtgc	12360
gtggcacgat	ctcggtcac	tgcaagctct	gcctcccggg	ttcatgccat	tctcctgcct	12420
cagcctcccg	cgtagctggg	actacaggcg	cctgccaccg	cgcccggcta	atttttgtat	12480
ttttagtaga	gatgggattt	cactacatta	gccaggatgg	tctcgatctc	ctgacctcat	12540
gatccgcccg	tctcggtctc	ccaaagtgt	gggattacag	gcgtgagcca	ccgcgcccgg	12600
cccgatttcc	cactttaaga	atctgtctgt	acatcctcaa	agccctatac	acagtgtctg	12660
gttcttatag	ggaatatgag	gcttacaggc	catgggtctg	gacacacaga	agggacggag	12720
gtcaggaggt	agaagggcgg	agagagggaa	caggcgagg	tcacatcctt	ggctttcaaa	12780
atgggccagg	gagagacacc	ctctgagcat	ggtaggacag	gaaagcaaga	ttggaacaca	12840
ttgagagcaa	ccgagggtgg	tgggcgtgg	ggcttacgcc	tgtaatccca	acactttgga	12900
aagctgaggt	gggtggattg	cttgaggcca	ggagttcaag	accagcctgg	ccaacatgg	12960
gagaccccg	ctctactaaa	tatacaaaaa	ttagccaggc	gtgatggtgc	atacctgtaa	13020
tcccagctgc	ttgggaggct	gaggcaggag	aattgcttaa	acctgggagg	cggaggttgc	13080
agtgagccga	gatcccgcca	ctgcactcca	gcctgggcca	cagagtgaga	ctccatctca	13140
aaaaaaaaaa	aaaaaaaaaga	taaaaagacc	aaccgaggaa	ttgaagtggg	ggggcggtcac	13200
agtagcagaa	gggggatcgt	ggagcaggcc	accctgtgg	catgcactgg	aagctcatta	13260
cctgacgatt	tggagctcat	cactgggggc	ctaaggagaa	tagatactga	aggatgagga	13320
gtgatggcgc	ggggcacggg	tgtctttgg	ggccagaact	tggggactgc	tggggtgcct	13380
cactgcaggc	cttctcagcg	ccctttatat	gcttacacag	gctgtttcta	agagggggat	13440
acattgcata	agcgttttca	gactacctca	tcatgggtcc	ctttctttac	cctctgtggc	13500
cctggtggcg	cactctctgg	gaaggtgcag	gtggatgcc	agacccgccc	tgccatccac	13560

ctgcacgtcc agagctgact tagcctcgag attgctgctg gcacctcctg ccccgggaca	13620
cctcgatgt gcccgaggag atgctggctc tgtgttttct gctggagttt ggtgcgtctt	13680
ttcctcctgc aagtggccac cgctcttggg tatgtcctca ggcttctgcg agtcatggct	13740
gcttctcagg tccttgccca gcgccaggag caaacctcc tggcactttg ttcaggggtg	13800
gatgcgccag tgttcctgct gtggaccccc atctcacatg agggctcttg gcctgcaggc	13860
tcgttcagga aacacccgct gagtacgcag tgtgtgccag ctgtgtccca ggcaatggcg	13920
gggacagtgg ctgctgctgg ggttgtggtg gcttctgggg actctgggga cagctgaggt	13980
gcaaggagcc acggctcctt gaggatgcag ttggactcca ggtggaaggg atggttgggg	14040
gaggtataaa tggggtcagg gaggagacac atttgaaca atgggaacat ttttaagatg	14100
ctatgtcggg aggcaacaag gtggccaacc caggtgctga ggagcccaca ccagccctgg	14160
acgtgttttg ccgctcacct ttgctgggga gtgggtgggag agaggattcc gttccacgtg	14220
gtgggtgtgcg cagctgggct gtgtggagct gggcgctagg aggaaggtgc tttctgcggg	14280
gctagccggg ctctgccttt gaacacaatc aggtccagg ttttcagcat ccagtgcagt	14340
agaggacttc acgggcagct gtggctgata ccttgatgaa ttgggagaag aacaaaggtc	14400
tatgaaatga ggtttcatgt agatggcatt agagacgcc acaacagatt tacagagtgg	14460
agcggagacg gcggatgggt ctgggaggcc cctcctgctg gccttgactg tgacagtgt	14520
cctgggaatc agcttcagg ccgccccagc agcctgactg acacacacag gggttttagc	14580
cccatcctgc gaccagctgt tgccatcatc agtgacagct gggagtggcg gtggttcag	14640
ccctgggcac cctccccacc tgctggggcc caccagggc agtcctgaca cctacaggtt	14700
gcttgagacc gcatacgagt cctgccccac cacgtgtgaa gcccgagtgg tcgtgggctg	14760
aggccccctg attgcatccc cacttcctt ctgcttcaca tagctgcctc ttctcacctg	14820
ttttccagcc tcctgggcta ggaattccag tgttgctgctg gctttgcccc aggacacctc	14880
cttagccctc ttctgagtc tagagccccg ggggttgga gttctggccc ctgggacacc	14940
tgcagccaca ctcagcttct cctgtgagcc tccagcatgt ccctcagga ccaagccctc	15000
acgttcttgc ctecccgccc acctgggctc agccagggga aggcctggct gggagcgtct	15060
ccctctgcc ctgcccttct cccctctacc ctgcccttct ctctctgcc ccgcatggc	15120
ttttatatcc tgtgccacaa gacatggctg tgtgtgaaag tggcagggtc tggcatctct	15180
gtgggtctct gagggccacg ctccagtgcc actcttccca cccgctggcc gtgccctcat	15240
gctggaggga cagcccagcc ctctcccgaa cccagcccc atgtgcccag ctgcccccg	15300

ccctctcccc	tggaagccgg	ggtcactcca	gccgtatgcc	atgggtgggga	catcctgctt	15360
ccttggcctt	ccaggggaagg	tcctctttcc	aaatggcgac	acctgggtccc	tgccctggagg	15420
ctggaagctg	tggeccctgt	atgcccctcc	agggctctgtg	cgctcggttg	gcccagattc	15480
ccatcacctg	catcatcacc	atcatcattg	tcatttcgct	tgtctgtgag	cgggcctggg	15540
ctcccagagc	agagaccctc	tgagggtccag	cctgagttgg	ggctctccgtg	ctgacccttg	15600
acggggactc	aggacgtacc	aggtctgggt	caggagtgac	ccccaaacct	cgtgcccttt	15660
gacaggcacc	cctgactttt	gctaagtggg	tggaggtgac	atcacttaca	gcgggagtg	15720
tgggacaggg	tctgttggct	gcactgtgct	cccagggatc	tggggagagg	ctatatccct	15780
gggctttggc	actgcagagc	tgtgtgtgtt	tgtgtgtgtg	tgtgtgtgtg	tgtgtgtgtg	15840
tgtgtgtgtg	tgtgtgtgtg	tttgctgctg	cgcacatgtg	tataagatct	ttttttatta	15900
catgaagcaa	gataactgtt	gctgtttcct	tttgggtttt	gtgttcaaca	gagtggggta	15960
cttcttccct	cagacaacag	aactctcccc	tttaaacacg	tgctgtcaga	gggtgggtct	16020
tgggctcatg	tctgtttgca	cagccgagtc	agaggaaaca	cagggttctt	cataaaaaa	16080
ctgcacagca	ggcgactgtc	cagagtcagc	ctgcaggacg	gcagcagccc	tgcccctcag	16140
agcacagcta	gggtgggctg	ctttgggatc	tcccgtcatt	ccctcccagc	tggcagccgg	16200
cggccggccc	attccttggg	gtgctgggtc	ggggggcgctg	cgctgctct	gctcaccttg	16260
ggaatgggac	agaagctggc	agctcggaga	ggacagggct	ggacccttgg	gtggcctctg	16320
gctggaccat	ctcattgtcc	tcagacacag	cctctcgggt	ctagtttcat	ttcctgaaaa	16380
acaagtgcac	agaactagag	caggagtcga	gagctacggc	ccccgggcca	gatccagccc	16440
tgccacctgt	tttcacacca	tgctcaagct	gagtgggttt	tacatttttt	aattacttga	16500
aaaaaaaaa	gccaaaggag	gtttcatgac	ccatgaaaat	tatatggaat	tcaaaaaaaaa	16560
aaaattatat	ggaattcaaa	tttcagtgtc	cataaataat	ttcttgagac	aggggtctcg	16620
tctgtcacc	aggctggagt	gcagtgtat	ggcatggctc	gctgtaccct	tgacctccca	16680
ggctcaagcg	atcctcctgt	ctcagcctcc	tgagtagctg	ggactacggg	tgtgtgccac	16740
caagcccggc	taattttttt	ttaatttttag	taaagacagg	gtctttctat	gttgcccagg	16800
cttttctgga	actccatctt	ggcctcccaa	agtgtctggg	ttacaggctc	gagccacgga	16860
gcccagcctg	tttttgtttt	ttcactgata	aagttttgcc	gggtgtggta	gtgtgtgcct	16920
ctagcgattt	gggaggctga	gggtgggagga	tcgcttaagc	ccaggagttt	gaggctgggc	16980
tcaagtgatc	aggaggtgaa	ctatgatcat	gtcattgcat	tccagcctgg	gtgacagagc	17040

aagaacctat	ctcttaaaaa	tatatattta	aaaagtattg	ggtgtggtgg	ctcacgcctg	17100
tggtcccagc	tacttaggca	tctgaggtgg	gaggatggct	tgagcccagg	agtttgaggt	17160
tgcagcgagc	caagatcgtg	tcactacact	ctagcctggg	tgacagagcc	cagaccctgc	17220
ctctttaaaa	aaaaaaacca	aaaaacatgt	attggaacac	agccatgcct	gttcagtcac	17280
gtgctctcca	tgctgctttc	tgctccagag	acccttatgg	cctgaaaagct	gaaaaatattt	17340
tctatccttt	acaaaaaagt	ttgctgacct	ctgtcctgga	aaattcatct	cccaagttct	17400
cttcgggcac	tggcgttcct	gggtgtccta	aatttgcccc	ctgttatttc	tgaactctgt	17460
tttggctctg	ttccctccca	ggagccagga	caggcacgtt	ctctgcatct	tgtcccctga	17520
cgcccagagg	cttggtctcg	ctcaggcatt	cttggaata	tctggctcca	ggaaaggcag	17580
aggcctcctg	agtcagccca	gagggaacct	gccccaggtc	tgggggaggc	ctgaccacgc	17640
agagtggctt	ttgccgatgg	gttgggcccg	tcaagatgtg	ctgaaaagttg	tcctcagaag	17700
gccacttttg	gattccttcc	tccagtatta	gagcaactga	gagctgctca	ttgcaagcct	17760
gatgttttcc	cagttggccg	ggtccaccgg	gtgccctggg	attctgggat	ctgggtggaa	17820
agtagggggc	ttgggggagt	gtcctggggt	ctggaatcca	ggtggcaagt	ggtgaggttc	17880
agggagtggc	ttctgagcca	ccataggggt	ctctgtggga	ggctctgccc	atccaggaga	17940
ttccgcaggc	cctgccggcc	cagagccagc	gtcctgcgct	tgccgaggct	acagccagcc	18000
ccagccgggt	ggaacagccc	gtcgctcctc	ctcactttgt	tttggggcca	cctgggagtg	18060
tggagcaagg	gtagagaggg	aggaagtggc	tgccggccgc	tgcccagcac	ccttgtttgc	18120
cttgggccct	ctgtgggctc	ctttttattg	ctcttcaatg	aagccaggga	aatggacttc	18180
cttgccctcac	ttcagttcaa	catgtctgga	agtttggtat	taaaattaag	aaagtgtgga	18240
aatagagcaa	gaagagaaaa	atctctccaa	gagataatag	tgacctctga	gctgggcccgc	18300
gtggctcacg	cctgtaaatac	ccagtacttt	gggaggctga	ggcgggcaga	tcacctgagg	18360
tcgggagttt	gtgaccggcc	tgaccaagat	ggagaaaccc	cgtctctact	aaaaataaat	18420
aaataaataa	ataaataaat	acaaaattag	ccaggcatgg	tggcgctctgc	ctataatccc	18480
agctaaggca	ggagaatcgc	ttgaacctgg	gaggcaaagg	ttgcagttag	ccaagatcac	18540
gccattgcac	tctagtctgg	gcaacaagag	tgaaactccg	tctcaaaaaa	aataaataaa	18600
taaaaaataa	aaatagttag	ctctggccag	gtgtggcagc	tcatacccg	aatcccagca	18660
ctttggaagg	aaggccgaga	tgggcagatt	gcttttagcac	aggagtttga	gaccagcctg	18720
gccaacatgg	tggaaaccca	tctctacaaa	aatagaataa	aatttaagag	gtaatagtga	18780

ccttttggtg	gategaaacc	tggattgctt	tctttttcta	aatgctgatt	cttttctttg	18840
tgggtgtttgt	gttctgtgcc	gatgtccctc	ccccagccct	gttattgtga	gtggaagaag	18900
gggaaagggg	tcgcccgtca	ctgtgagccc	ctcctctcac	gctgggtgtc	cttggagaag	18960
cctgcacttc	ttcattgtac	gccagggctg	ggccccccc	tggagtgggt	ctgtgctgct	19020
gggatggggc	caacccctca	gatgttttct	gagtgtcaca	cacaggtgtg	tgcattcatg	19080
gcctttgcgt	gtcttctgt	tgtggaggca	aaaatgtgaa	gaaccctaga	tgattttggg	19140
accagggctc	catcacctgc	tgttcattgc	acaccggagc	atccaggcat	gggtggagag	19200
ctcagacttc	caggcacggg	cgcaggggct	ggctaacca	tggtcccgcc	cgctgctcg	19260
tcagaaccgc	ctgttgggag	ctgttatcat	gataccatac	ctgggccctg	ggctatccga	19320
ttctgactta	attgctccag	gttggggcca	ggccgttggt	tgctgttttg	ttgtttcttc	19380
tgtgacgtta	gccactgggc	taatctgagc	ccctcagtta	caggtggaga	aactgagacc	19440
catgggggtg	caaggacttg	ccgaggaccc	agagccctt	gggggcagag	ctgaggcggg	19500
gcctggcttt	gggtcccaga	gcttccagtc	ccctcccgc	tctcctaaca	gctttttttt	19560
ttgagacaag	atctcacct	gtcacccagg	ctggagtga	atggcatgat	ctcggctcac	19620
tgcaatcttc	gctagctgcg	ttccagcgat	tctcctgcct	cagcctcccg	agcagctggg	19680
attacaggtg	tgtgccgcca	tgcccagctc	gttttttttt	gtacttttag	tagagatagg	19740
gtttcaccat	gttggccagg	ctgatctcga	actcctgacc	tcaaatgatc	cgctgcctc	19800
ggcctcccaa	agtgctagga	ttacaggctg	ggatcacact	gtgcctggcc	ctagcagctt	19860
tgtcctgtgc	catccaacaa	cagatgaccg	aagtctttgt	ttcttaacat	gcattccatc	19920
tgccctacag	ttttgccacc	tgcaaacag	aggacttgct	gcttttctgg	taagctggaa	19980
atgtaatctg	gtagcaggag	gcctgtggaa	gcttgccttt	aatggccttg	tgtctctttc	20040
atcctgtcct	gagagccgga	gaacttggat	gttgaccta	actcaacctt	cctgttaaca	20100
tacagttctg	caggctcatg	gatcatcaga	accacgtcct	atctcacgcg	gctgtatgct	20160
tccgttggtt	cagggtgttt	taccttgaca	gtattttctc	ctcgggtggct	tttgcggtgg	20220
ttgcttttaa	tcagcattga	ctcttcaaga	aaaatattta	gctgctacat	ctcagaggag	20280
acaggggtga	aagcatctga	gacctgcagg	ctcagactta	gaaccagaag	tgccctcaga	20340
gttcatccgg	ccctgaccca	gcgggaaatg	agttcacaga	gaagcgggag	aactttgccc	20400
caggccctgc	cgttgctcat	aactgcccc	ggcccttaca	tttgctccag	gtcctgcccc	20460
aggccctgca	gttgctcata	actgccccag	gtccttatat	ttgctccagg	tcctgcccc	20520

ggtcctgcag ttgctctgtg tgggtgggtgt gatctggagc cctccgcca ttgctgcacc	20580
tggggcaggc attgctaatt gatcccagga ctcttctctg cggagcacgc cctgggtctc	20640
caggcagccg ctgcctgtca gcctgcagtg gttcgggaga ggacacctgc ttgcctggtc	20700
tgttccaaat cttgcttctc atcccagcac aggtaggggg tgctatggga aagggtacct	20760
cagttggccc tgtcactgct ctatcagctg gggacgtggc atcctagtga aaacatcatg	20820
gccgggcgcg gtggctcacg cctggaatcc cagcactttg ggaggctgag gaggggtgat	20880
cacttgaggt cagaagttcg agaccagcct ggtcaacatg gtgaaacca tctctactaa	20940
aaatacaaaa attcgccagg tgtggtggcg ggtacctgta atccgagcta ctcgggaggc	21000
tgaggcagga gaatcgcttg aacctgggag gtggagcttg cagtgagccg agatcttgcc	21060
actgcactcc agcctgggca acagagttag acgctgtctc aaaatctcaa acaaacaac	21120
aaacaaaaaa caaacaaca aagcgtcatt tatccagcac cctggggaa ccatgctacc	21180
tgggtgttta tggtagcttg caaggtagc gtgaagttgc tgctcttggg cattgaaccc	21240
gtcttgtttg gggcagctca gggcccaggc aggggtccggg ttggctctcg ttggtgtggc	21300
cctggcccat ccagacctat atttctgccg tcttgcaggt gatcaatgtt gatgggacga	21360
agaggcggac cctcctggag gacaagctcc cgcacatttt cgggttcacg ctgctggggg	21420
acttcatcta ctggactgac tggcagcgcc gcagcatcga gcgggtgcac aagggtcaagg	21480
ccagccggga cgtcatcatt gaccagctgc ccgacctgat ggggctcaaa gctgtgaatg	21540
tggccaaggt cgtcggtagg tccggggggg cccaagccat ggctcagcca tgcagacttg	21600
catgaggagg aagtgcaggg tccatgcctg ggcataagtg ttgagctcag gtgccccgac	21660
ctggggaagg gcaggacagg aaaggtgaca gtatctggcc aaggacagat ggggaaggac	21720
caaggagct gattagggag tggttatgga ctaggaatgt cggtacaat ggttagaaag	21780
tgactaacat ttgttgagca cctgctgtgt gcccgccct gccgggagc cttcgtgcc	21840
acagtgacct cgtctgcaaa tgtagttct tgcctactc gactgggga gcaggacgca	21900
gagccgtgca tctcacaggt gccaagetca ggactccctc ctgggtctgc ctgggctggg	21960
ctgtgcttgt tgccctgtg gccacgcct gtgcacctc cactgaaag ccaggatctt	22020
caggacgtc cccgaggagg tcgttgtctg gcacaatgat ttgtctctc ctgaaaagg	22080
gacagagtta cactggagag agcagcatcc aggtgcggca gggacaggcc tggggctcgc	22140
gggcagggac tctgtgtcct gccggggctc cactctgcac ctgcttgtca gaggcactca	22200
gtcaatcttt gctgatgaag gatgagagga cagaggacgt gatgcttgct gctgcattgc	22260

ctgcagtcct	gggtgagatg	cccgggttga	ctctgctgcc	cgtcgggtgg	atgtgatgtc	22320
agatccccgg	ctttaaaata	cgagggagct	gggaattgag	ggagcagggt	ggggcagaaa	22380
gcacagcccc	gtggaagcct	ggagctgagg	cagtgtgggc	gacccttga	gcagtgagtg	22440
cttccttcat	ggccttcac	gcaccctgca	gtcctcatgt	aggggatgcc	atccatgaat	22500
ttagttttcc	cagcctcctt	taaaaacgcg	ttcatgctgg	ggccggggca	gtgcagtggc	22560
tcacatctga	aatcccacca	ctttgggagg	ccgagggcgg	tggatcatga	ggtcaggaga	22620
tcgagaccat	cctggctaac	aaggtgaaac	cccgtctcta	ctaaaaatac	aaaaaattag	22680
ccgggtgcgg	tggcgggcgc	ctgtagtccc	agctactcgg	gaggctgagg	caggagaatg	22740
gcgtgaaccc	gggaagcggg	gcttgcaagt	agccgagatt	gcgccactgc	agtccgcagt	22800
ccggcctggg	cgacagagcg	agactccgtc	tcaaaaaaaaa	aaaaaaaaagt	aaaaaaaaaa	22860
aaaaattagt	ctgggtgtgg	tatcacgcgc	ctataatctc	actactcgag	aggctgaggc	22920
ggagaattgc	ttgaaccag	gaggtagagg	ttgtagttag	cccgatcgt	accactgccc	22980
tccacctggg	caatagagcg	agactctgtc	tcaaaaagaa	aaaaaaaaaaa	agaacattta	23040
tgccaggtgt	ggtggctcat	gcctgaaatc	ccagaacttt	ggaagactga	ggcaggagga	23100
tcacttgagc	ccagaaattt	gagagtgtct	tccctgggca	acatagagag	acctcatctc	23160
taccagaaaa	aaaaaaatta	gcccggcatg	gtggcatatc	cctgtggtcc	cagctactta	23220
gggggctgac	gtggcaggat	cacctgagtc	tggaggcaga	ggttgaagtg	agctgagatc	23280
atgccactgc	actccagcct	gggtgacaga	cagagaccct	gtctcaaaaa	aaaaaaaaaaa	23340
aaaaagcatt	tactatccac	catggaaggt	gagactgacc	tgtgagtgat	tgttcaaaga	23400
aaaaaaaata	aacccagag	ataagacaaa	aggggtgcctc	catgggggtg	tgatttaaag	23460
ctgagaaatt	gggcttcttc	cccctcccct	ctcaccctgt	ggtttgctaa	aggagatggg	23520
aaaaaggatt	cttttttttg	ctgaaatatt	taacactaaa	ttaaagccaa	ttttaacagc	23580
actttggttg	atgagtga	ttaacagact	ggccaaaaat	aaacgaacgg	tctgtactat	23640
gtgaaaaaga	ggcagctttg	gccatgctgg	gccaatgtga	gttttcaggg	ttgctgggaa	23700
tgtctgtgaa	tcggaggaag	ggcctagctg	ggactctcag	gagccaaggc	cctgaggggc	23760
aacttgccctg	gtccctgccc	tgaggcgctc	actgctttct	tcctgggcca	gatcacaggc	23820
ccggaggctg	gaccactggg	ctggcactct	tgccgagctg	ctccctgact	tcctgaccat	23880
gctcctttca	gcagccttgc	tgcactttag	tttccttgaa	tgaaaaatgg	ggatgagaat	23940
agctcctacc	tccaaggtga	atggagttag	ttcggacagg	tgaactccctg	ggaccagtgc	24000

ctggcgccctg acaaggtcca gtcagagccc gcactgctgt tactgatacc cttggctgta	24060
ccaggggaga acttggttgc cattgccagg tgttctccca ccacccccac tactgtccct	24120
gtttgatgtg tggcggaat aaagctgtgc acattggagc ttttggcaca tcttggttt	24180
caggtgaaag gtgcgtgtgt gtttgagggg ttagcctggc caaccagcc atgaggtcgg	24240
acctgacctg ggggtgagtc ctgagctcgg caccctgag ctgtgtggct cacggcagca	24300
ttcattgtgt ggcttggccg caccctttc cctgctgggc tgttgatgtt tagactggag	24360
cctctgtgtt cgcttcagg aaccaaccg tgtgcggaca ggaacggggg gtgcagccac	24420
ctgtgcttct tcacaccca cgcaaccgg tgtggctgcc ccatcggcct ggagctgctg	24480
agtgacatga agacctgcat cgtgcctgag gccttcttgg tcttcaccag cagagccgcc	24540
atccacagga tctccctcga gaccaataac aacgacgtgg ccatcccgct cacgggcgtc	24600
aaggaggcct cagccctgga ctttgatgtg tccaacaacc acatctactg gacagacgtc	24660
agcctgaagg tagcgtgggc cagaacgtgc acacaggcag cctttatggg aaaaccttgc	24720
ctctgttctt gcctcaaagg cttcagacac ttttcttaa gcactatcgt atttattgta	24780
acgcagttca agctaataca atatgagcaa gcctatttaa aaaaaaaaa gatgattata	24840
atgagcaagt ccggtagaca cacataaggg cttttgtgaa atgcttgtgt gaatgtgaaa	24900
tatttgttgt cgttgagct tgacttcaga cccccacc actcccttgt cggtgcccg	24960
ttgctcagca gactcttctt tcatttatag tgcaaatgta aacatccagg acaaatacag	25020
gaagactttt tttttttttt tttgagacag agtcttactc tgttgccag gctggagtac	25080
cgtagcgtga gctcagctca ctgcaacctc cgctcccag gttcaagcga ttcttctgcc	25140
tcagcctcct gagtagctgg gactacagac atgcaccacc acaccagct aattttttt	25200
atatttttag tagagacagg gtttcatcat gttggccagg ctggtcttga actcctgacc	25260
tcaggtgatc tgcccgctc ggctcccaa agtgctgaga taacaggtgt gagccaccgt	25320
tcccggcata ggaaaacttt ttgccttcta aagaagagtt tagcaaacta gtctgtgggc	25380
tggccttctg attctgtaaa gaaagtttga ttggtggctg ggtgcggtgg ctcacacctg	25440
taatcccatc actttgggag gccgacgtgg gcataatcacc tgatgtcggg acttcgagac	25500
cagctcacc aacgtggaga aacccgtct ctactaaaaa tacaaaaaa aaattaaccg	25560
ggcatggcgg cgctgctg taatgcagc tactcaggag gctgaagcag gagaattgct	25620
tgaacctggg aggcggaggt tgtggtgagc tgagatggca ccattgcact ccagcctggg	25680
caacaaaagt gaaactccgt ctcagaaaaa aaaaagtttg attggtgtaa ccaaagcgca	25740

tttgtttatg gattgtctgt ggcagctttt gttctgccga gatgagttgt gacagatctg	25800
tatgggctct aaagcctaaa acatgtgcc a tccgccccctt tacagaaaaa gtgtgctgac	25860
ctctgttcta aagtattgga caactacaat gtttgcctcat ttattattct atgatttggt	25920
ttctgctttt tgttggtgtt gttgttggtg agataggggt tccctctgtc actcaggctg	25980
gagtgcagtg gtgtaatctc agctcactgc agcctcgacc tccctgggctc tagtgatcct	26040
ctcatctcag cctccctagt agctgggact acaggcacac accaccactc ctggctgatt	26100
tttttttttt tttttttttt ttgtggagac aggggtttccg catgttgccc aggctgggtt	26160
caaactccta ggctcaaaca cccacctcag cctcccaaag tgctgggatt acaggcgtga	26220
gccaccatgc ccagcctatt ctactgtttg tattacatag ctttaaaaga ttttttatga	26280
ctttaagtca caagggttct ttgtagaaaa aaatatatat ataggaaagt ataaaaagaa	26340
agtaaaaatt gtccataacc tctccagcca gagacgaccg ttgctgacac ctgagcatat	26400
tgcccttaag tcttttttct ctaagatagc atttctcttc atcacagtca tatgctacgc	26460
agaattctgt atcctgattt ttctacttga cattacaaca ggtatttgat ggcgctgtga	26520
caaactcttt ggcacaatct tttaaatgta tgaaatactc cactgcacag atgtttgctt	26580
ttaggcttaa ctgttctttt attttgctg tgctgggttac agccgggcac agtggctcat	26640
gcctgtaatc acaacacttt gagaggggtga ggcaggagga tcacttgagc ccagaagttt	26700
gagaccggcc tgggcaacat agtgagacc cactctctaca aaaaactttt ttaataagtc	26760
gggcgtagtg gtgcatagct gtagtcccag ccaccaagga ggctgagttg ggaggattgc	26820
ttgagcccca ggaggttgat gctgcagtga cctgagatta ctccactgta ctccaacctg	26880
agcgacagag caagacttgt ctggggaaaa aaaaaaaaaa aatatatata tatatatata	26940
tatatataca tatatacata cacgcacaca cacataatat aaaaatatat atttataaat	27000
atataatata taatataaaa atatatatat ataaataaaa tttataaatt atatttataa	27060
gtaaatatat aatatataat ataaaaatat atattatata atatataata aaatatataa	27120
tataaaaata tatatttata aataatatat aatacatact tataagtata tatttataat	27180
atatgtaatg tatatttttt aatgtatgat atataatata catttataaa tacacattta	27240
tattatttta tataaaatat atataaaatc tccaagttgc tttttccaaa aagggtgctt	27300
gctgcatttc aaacattcat ttaaaaaactt gaatgctggt gatctgggtcc agaatgtgtt	27360
cagtagctgc tgccagtggc caagcatctc gggagatgtc tacaaaacac gctgggtctg	27420
gcctggcggtg gtggctcacg cctgtaatct cagcactttg ggaggctgag gcagggtgat	27480

caactgaggt ctggatttcg agaccagcct tgccagcttg gtgaaacccc atctctacta	27540
agaatacaaaa aaaattagcc aggcgtggtg gcatgtgcct gtaatccac ctacttggga	27600
ggctaaggct ggagaatcgc ttgaaccag ggggcagagg ttgcagtga ccgagatcgc	27660
accattgcac tccaggctgg gcaagaagag cgaaactccg tctcaaaaaa aaaaaaaaag	27720
atgctgggttc ctaaaatgtg gcccttttcc tctcacctg ctgccagacc atcagccgcg	27780
ccttcatgaa cgggagctcg gtggagcacg tgggtggagt tggccttgac taccocgagg	27840
gcatggccgt tgactggatg ggcaagaacc tctactgggc cgacactggg accaacagaa	27900
tcgaagtggc gcggtctggac gggcagttcc ggcaagtcct cgtgtggagg gacttggaca	27960
acccgaggtc gctggccctg gatccaccca aggggtaagt gtttgccctgt cccgtgcgtc	28020
cttgtgttca cctcgtatga gacagtgcgg gggcgccaac tgggcaagggt ggcaggctgt	28080
ccgtgtggcc ctcagtgatt agagctgtac tgatgtcatt agccttgatg gtggccagga	28140
ctggtagggc cctcagagggt catggagtcc cttcgtggag cgggtgctga ggctgtatca	28200
ggcacagtgc tggtgctttt cacctgggccc gtctcaccga agtgtccatg gagcctgcgt	28260
aggggtgggta tctgtgtcga ttttacagat gcagaaacag gctcagagaa accgagtga	28320
ttccctaagg tcacataccc agttagagca gagctgggccc aggaagtgtc gtctcaggct	28380
cctgaccagg tctccttgc tttgactctt gccaaaacca tgatccagaa ctgactttga	28440
ggtccccgga cctcaggctc ctccgaaatg gcctcttgga ggctgctgag ccacagctta	28500
ggaccacact cgagaggcaa atgtgctttg agctgccagg cgtcctgggg gccctgcctt	28560
gggcacgggg ttcagacagg cccagatgt gtggggcgctc tttctggact tgagttttct	28620
tttctgtgtg gtggacacag tgcaccccc ttaaagcacc tgtgatgtgt gcagcagccc	28680
aatccctgcc tgtcgcctgt tctgctaggg aaggaaggaa gacttcagga tggcaggaca	28740
acagaaagag gtccagggtt tagagcaagg gcagggtcaa cttagaaaat tctggaatga	28800
ggatgtgcat ttcctcttct ggatctgcta aaagaagagg gaaggagggg ctgctggggg	28860
aggagcccag agccgagttt acatccggat cccgcaaggc ctcccctgcc ctgaggtctt	28920
gttttgtgat gtgcttgtgt ccatactggt ttctgccgtg tccccaat cgggccaagc	28980
ttaggtggat gttccagcac aactcacc tgtctgtgca cctgtttttg tgtccgtaag	29040
tgggtattta ctcaccttac gagtgaacca ctgtgggaat tcaggagagg ggcgcagtga	29100
ccaccctgg agggatatgt gtgtggcagg ggtcgagggt ctgcacctc cctgcttct	29160
gcgcgtggct ttctccagga cggggagggc tgagctgaag aggtggggac agttgcgtcc	29220

ccccgccacc cactgtcctg cgggtgagagc agactcactg agcctgccct tctcccttgt	29280
gccttccagc tacatctact ggaccgagtg gggcggcaag ccgaggatcg tgcgggcctt	29340
catggacggg accaactgca tgacgtggt ggacaagggt ggccggggcca acgacctcac	29400
cattgactac gctgaccagc gcctctactg gaccgacctg gacaccaaca tgatcgagtc	29460
gtccaacatg ctgggtgagg gccgggctgg ggccttctgg tcatggaggg cggggcagcc	29520
gggcgttggc cacctcccag cctcgccgca cgtacctgt ggctgcaag tcccccaacc	29580
tggcaggagc tgtggccaca ccacgactg ccagcagcc tcacctctg ctgtgggagt	29640
tgtecccgtc caccctggg tgcccttctg gcagttatgt cgggagaggc tctggtgaca	29700
gctgtttcct gtgcacctgc tgggcactag gtcccagcta atccctgtgc caggactcta	29760
atttcacct aacacacatg gtggttttca ttgctgggga agctgaggcc tgagcacatg	29820
acttgcccta ggtcacatag ctggtgagtt caggatcccc cagagatacc agggccagca	29880
ctcgatcccc acccagccct gaaccccacc atgtgctggg attgtgctgg gagtgtccac	29940
acgctggga cccagggt ggtgctctca tctcctttt ccagatcatg agaatgaggc	30000
tcagggaagt ttgaaaaaaaa cctatcccaa gtcacacagc aacaggagca ggatttgaac	30060
ccagaaaagg ggaccgcaca ctctgttctg ctagagtagt tagctgtcct gggatgatg	30120
gcaggtgaca ggggcaactg tgcttaacaa aggaaccccc atccccctg ccaagttggg	30180
agactagaag gtcaggggca gaagctctga agggccagggt gcagtggctg acacctctaa	30240
tcccagcact ttgtgaggcc aaggcgggca gatgatttga gcccaggagt tcaagatcag	30300
cctgggtaat gtagtgagac gccatctcta caaaaaaatt ttttaaaaat tagctgggca	30360
tgggtggttca tgccctgtagt ccaagctact tgggaggctc aggtgggagg attgcttgag	30420
cccaggagggt tgaggttgtg gtgagctgtg atcatgccac tgcactccag cctgggcaat	30480
agagttagac cgtctccaaa aaaaaaaaaa gaagaagaaa aagaagctct gaggtccaa	30540
gtccccaggc accccttggc ttgagggcag acaaggagg agagggtcac ctgggcagcc	30600
ctgacttttg tcccctggca aaggacctt cagtgcctt ggccctagga gagcctctga	30660
gcacgtcagc catgtcgaac cgctcaggaa gggcagcaag aatttggtt ctgacctctg	30720
cctctectac tcgccatctg cactgggtgt ggttggtccc attttacaga tgaggaggct	30780
ggggcatcga ccagctgaat gccttgctcc aggtactgcg taggcagagc tggcagttga	30840
accccggtgc ctggttgctg ctgggggtgg gctgcacct gacttgtag gccagtagca	30900
aggtttgcac gtgacttctg gaccgtcacc cagctctgca gcacatccc tgacctagct	30960

catccaggcc gcatgcaaac ctgttgccag gcgagaaacc agtcaccgca cagctgtggt	31020
tgctgaaat gattaagctc attaatcacc ccggagttag gacagactca gatgaaaacc	31080
agcaaaagcc ctggaaactc atgtgacct gccaatgagg gcggccatgt gcattgcagc	31140
ctggccgtca ctctcggtta cgtgttttgg acttaaaccgc tccggatggt tactgagtgc	31200
ttgattaata acatggaagg cctgggtctca ttgctgtggg agtgaaggat gcacagccag	31260
gcctgacatg atgagaacaa gaacctggag tctcgtgcc tgggtggtaa tctggccct	31320
gccacttagc aactgtgtga ctgtagccag gtcacttaat tttgctagat cctgcctgcg	31380
cttcagtga tcttctgtgt tttccaagg ggccaaacac ttttaaggcat tcatgtggtc	31440
gctaggctgc agggttgaac cctggctcac ccgcagggc gccgtgtgct ctgtggcctg	31500
gctgtgcctt tgctgacacc gtgcccgtgt gtgttcacgc aggtcaggag cgggtcgtga	31560
ttgccgacga tctcccgac ccgttcggtc tgacgcagta cagcgattat atctactgga	31620
cagactggaa tctgcacagc attgagcggg ccgacaagac tagcggccgg aaccgcaccc	31680
tcatccagg ccacctggac ttctgtatgg acatcctgggt gtccactcc tcccgccagg	31740
atggcctcaa tgactgtatg cacaacaacg ggcagtgtgg gcagctgtgc cttgccatcc	31800
ccggcggcca ccgtgcggc tgcgcctcac actacaccct ggaccccagc agccgcaact	31860
gcagccgtaa gtgcctcatg gtccccgca cctcactccc tcgttagatc aggctggttc	31920
tgggagctga cgctgaaagg agcttctcat ctggggttcc tgggtgtaca tagatggttg	31980
ggtaggttgt gactgcaca agctgcatga tgctacctgg gggtcagggt ccaggctgga	32040
tggacttggt gttcatcag gacatagata aatggccaaa actcctcagc tggaaaggctc	32100
tgggcaggat ctttgggtgt gaaaaccagt cacaggggaa gggtgcttgc tcatactgcc	32160
agcacagtgc tgagtgttt ccatagcgt cgtttactcc tcaagcctgg aggggtggga	32220
gtagcatggt ccatttcac gtacaaggaa ccgatgcac agagagggtg ggcaacctat	32280
ccaaggccat acaactgggg tgggttgagc cggggttgac tgtggcaggc tggctcaaga	32340
gtcctgtc ctgaaccct gccaggcagc ctggcatcag ctgggggaat ttttgcctg	32400
accttgga gcaagtgggc ctctttgttc tcatgtcagt gatgagaaga gtgactttcc	32460
tatggccct ctggagtaca ggtgtttcct gttggcgggc tcttccccca tgacatcagc	32520
agcgagctgg ttatgattcc ctacgcagaa cttgatagtt tataaagctc tttgtcatcc	32580
aggccccgtt ggagtctcac gcagacctgg tcgcaggcgg ggctggtctt gcctgtccca	32640
gctgcatgga tggggaactt gaggcttgca aagggttaagg ggctgttcga ggcccaggct	32700

ggcaggagat gggcctgggc cagagtctgg gacttcccat gcctgggctg tctttggctc 32760
 tgttgctcac catccctccc tggggccatg accttagaga gccaaatgga ggtgcaggta 32820
 acccacggca aggaggggtt gccatgactc agagtccccg tcctgtggcc ggcagtacct 32880
 ggtgcaacga cttggatttc agaccagcca ctgtagcccc ctgacgggtgc gctcgaagtg 32940
 ccacagcttc tgaagccagg caggactcag gccaggagac tctgttagct gttgagaggg 33000
 agaggccaac ggatgttctg gttctgctag agagctgggt cttcggatcc tggtagcagt 33060
 gcactgagag gagggcccagc ttgattctgg ggctgccttg tggtagcatg tgctgctcac 33120
 tgacaccctc gaggagtgtc ttctctcggg cttgttgact gtgcccgggt ttccgcagtt 33180
 cactggtgca cacataggca catagcaaac cgcacacaca gtcgtgggta tgagtctcac 33240
 tacattccac caccagtgtt cactaccatt acctgccttc cgtcttaagt gttcatcatt 33300
 taaaaataaa tttattgggc tggacgcggt ggctcatgac tgttatccca gcactttggg 33360
 aggctgaggc gggcagatca cctgagggtca ggagttcaag accagcctgg ccaatatggt 33420
 gaaactccat ctctactaaa aatacaaaat tagctgggca tggtaggggca tgccataat 33480
 cccagctact caggaggctg aggcaggaga atggcgtgaa cccgagaggc agagcttaca 33540
 gtgagcccag atagcaccac tgcagtccag cgtgggcaac agtgcgagac tccatctcaa 33600
 aaaaaaata aataaataaa agaaaaataa atttatgac tatttcaaaa ataacacatg 33660
 tactttgaaa cagcagagac acatatgaca cggagaatga aattcccat agcgcacccc 33720
 caagagacag ccctggctcc cccgtcttcc cctgggacct ccagcggggc agatgctgag 33780
 ccgctgttg tcgagtggcg tgctatcccg tcctccagct cctctgtggc ttacagacac 33840
 ccacctgcag ccctgtcttt gcctcctcta gcgccacca ccttcttgct gttcagccag 33900
 aaatctgcca tcagtccgat gatcccgac gaccagcaca gcccggatct catcctgccc 33960
 ctgcatggac tgaggaacgt caaagccatc gactatgacc cactggacaa gttcatctac 34020
 tgggtggatg ggcgccagaa catcaagcga gccaaaggac acgggaccca ggcagggtgc 34080
 ctgtgggaag ggtgcggggg gtgcttccca aggcgctcct cttgctgggt tccaggctgc 34140
 tgcccctgtc cttagcagag ggaggaaaca gaggatggct ctgggtgaat gatgacttgg 34200
 gcttcogatta tgtagtcaca gggtagtacc ctgagatgcg tggaaccccg agactgtgat 34260
 tatatgtaga aactgggttt cccggttgtt taagtagtca tggtaggggt agacccaca 34320
 ggacttttgt cttttcaaga aagaaaatgg tcgtgtgtca tgcaggggta gttggtactg 34380
 gttaatccag gtttatcctt tattttgtgg gaactgtaca gtcatttctg ctacaatgct 34440

gtatatgctc	ttctgaaaga	cacctatgca	aaatcgaca	gtaaaaatga	cacaactcat	34500
agggaaaagcg	gggccagggc	acagccctca	aaatctccat	caatgacatg	taagaaaaga	34560
gaggaacctg	ggaaatagca	aagtgccttt	tgacattaa	atggtttagct	atatcccaca	34620
atactgtgca	ttcgtaaagc	ttaatgctgc	aataaatagc	gcacttcacc	ttgggaagat	34680
ctggagttgg	cttatgagtg	tggaagggtg	tagcgcatga	gtttttgtga	aacactggaa	34740
ggaggattgt	gggaaatcaa	atggaaagtt	ctcaccccag	gcgtggagaa	gagtgggtca	34800
tggccccagc	agtgagccca	gggaggtcag	agacggaggt	gtgtgtgtgg	gtgtgaccct	34860
gcgcagttcc	ctgccggtg	tagttttttg	cattcgctta	atgtttctcg	tggaggaaat	34920
tgtgcatgag	caaagtga	accgtgctgt	gctcaaattg	tcctaataca	tcattgcatt	34980
ggaacagatt	ggcttttttt	tttttttttt	tttttttttt	tttttgagat	ggagtctcac	35040
tctgtcacca	gcctggagtg	cagtggcatg	atcttggtc	actgcaacct	ttgcctccta	35100
tgttcaagtg	attttcctgc	ctcagcctcc	tgagtaactg	ggattacagg	catgagccac	35160
cgcgcccgcc	cagatttgca	tttttgaaac	aactgctagg	ctggggcgcg	tggctcacac	35220
ctgtaatccc	agcactgtgg	gaggccgagg	caggtggatc	acctgaggtc	aggggttcga	35280
gaccagcctg	gccaacatgg	tgaaaccccg	tctctactga	atatacaaaa	atcagctggg	35340
tgtggtggcg	ggtgcctgta	atcccagcta	ctcaggaggc	tgaggcagga	gaattgcttg	35400
aaccaggag	gcagagggtg	cggtgagccg	agatcacacc	attgcactcc	agcctgggca	35460
acaagagcaa	aactccatct	caaaaaataa	aaaatagaaa	aacaagtgct	gtagcggaag	35520
tgagcacttt	gcggagtcag	gcttgtgtgg	cctgttccac	aaatgatgtg	ctcacggtgg	35580
cctcaggccc	acctggagtc	tgacgcatgg	ggcacaacag	gttcattagt	gtagaattcc	35640
aggacaggcc	tggctcctaa	gcagccttct	tttacaaaaa	ctgcagagcc	cgctgtatc	35700
ctagcacttt	gggaggccga	agtgggtgga	tcacgaggtc	aggagttcaa	gaccagcctg	35760
gccaacatgg	tgaaacccca	tctctactaa	atatacgaaa	attagctggg	tgtggtggca	35820
cgcgctgta	gtcccagcta	ctcgggaggc	tgaggcagaa	ttgcttgaac	ctgggaggtg	35880
gaggttgcag	ggatctgaga	ccatgtcatt	gcactccagc	ctgggcaaca	gagcgagacg	35940
ccatctcaaa	aaaaaaaaaac	ctacagagcc	acacggcctc	tttctccacc	gagtgttggt	36000
gtgggagctt	gtgttattgt	ggtgaaatct	tggtactttc	ttgaggcaga	gagaggctga	36060
gcgcctggag	agactttcac	atgggtcgcc	atgtccgccc	tcggtttcgc	tgttgtgctc	36120
cccatctgaa	ggctggtgcc	gtccagacag	gctggacgcc	cctttccacc	agatccttcc	36180

tcccgcagca gtttctagtt acgttgtact gtgaggtctg tgtccttggt tgatggcaaa	36240
agtcagccga attgaaattc agagccatgc ctggctccct ggagcttctc tctggggcag	36300
ctgtgatcat tgcctctgct gtgggtgtggg tggtggaat ggattccttt catcttgctt	36360
gctacaggtg actgtcacgt ggagtccttt ggagagaggg acgtgttaat tgatggatgt	36420
ggctcccatg ctgagaaagc tctggggcgt acattgcctt agagtttcat tggagctgcg	36480
ttcttttatg gtgtctgcta ggcagaagtg atgaagactt ggaagaaaac ccagaaggtt	36540
ttccacttaa tttggaaaat gtgcttttcc cctcctgtgt cttttgctaa ggtccagcct	36600
cctgcagcct ccccgctctg tggactctgg ctttgattct ttattaggag tccccctgct	36660
cccccaaaag atggtgtcta aattatcatc caattggccg aggttttggt ttctattaat	36720
tgtttttatt ttttattgtg gtaaatatat ataacataaa atttgccatt ttaattgttt	36780
tgttattgtt gtttttgaga cagggctcca cccagtgcc caggctggag tgcagtgggtg	36840
cgatcatggc tactgcagc ctcagcctcc agggctccag tgatcctctc acctcagcct	36900
ctctagtagc cgggactaca ggcatacact accacatctg gctgattttt tgtatttttt	36960
ttttattgta gagaccgct atgttgccca ggctggcttc aactcctgga ctcaagccat	37020
cctcccacct caccctccca aagtgtctggg attacaggca tgagccacaa caccagcca	37080
ttttaatttt tttttttttt tttgagatgg agtctcactc tatcgcccag gctggagtgc	37140
agtggcgtgg tatcaactca ctgcaacctc tgcctcccag gttcaagcga ctctcctgcc	37200
tcagcctcct cccgagtagc tgggattaca ggtgcccatc actatgcctg gctaattttt	37260
gtatttttta gcagagacgg ggtttcacca tgttggccag gctggctctg aactcctaac	37320
ctggtgatcc gccgcctcg gctcccaaa atgttgagat tacaggtgtg agccaccgtg	37380
cccggccttt ttttgttttt gagacagggg cttgcctgt caccagact ggagtgcaat	37440
ggtgggctct tggctcactg cagcctccgc ctcccaggct caagttgtgc acctccacac	37500
ctggctaact gtattttatg tagagacaga tttcaccatg ttgccaggc tgggcttgaa	37560
atggactcaa gcagtccacc cacctcagcc tcccaaagtg ctgagattac aggcgcgagc	37620
caccgcaccc agcccatttt acctattctg cagttgacag ttcagtggca ttcagtcagt	37680
tcacgaggta accatcactg ccattcatct ccagactact tcaccttctc ggcagatgtc	37740
cgaaactgtc cgcattgaac aactcctca tctccctctg acagccacca ttctactttg	37800
tatctctctc tgccttctct aggtacctca tgtaagtgga attataccaa tatttgcctt	37860
tgtgtgactg gcttctttca tgtgacatgg tgtcctcaag gttcatctgt gttatagcct	37920

gtgtcagaat ttccttcctt aaagcctgaa taataacccg ttgtaaaggc tgggcgcggg	37980
ggctcacacc ctctaataccc agcatttttg gagtccgagg tgggcagatc acttgaggtc	38040
aggagtttga gaccagcctg gccaacatag tgaaacccctg gctctactaa aagtacaaaa	38100
ttagctgggt gtggtggcgc gcacctgtaa tcccagttac tcaggaggct gaggcaggag	38160
aatcgcttgt acccgggagg cagaggttgc agtgaaccaa gattgtgcct ctgcagtcca	38220
gcctgggtaa cagagtgaga cttcctgtct caaaaaaaaa aaaaatcatc ggatggatgg	38280
acggaccact tcttgttatt tatccatcca cgggtgctag gtttcttcca cttttggttg	38340
tcgtgaataa ggccactatg aacatttctt tccgtgggtga aggttttgta ctagtgagga	38400
aaaggcgtgt ttgtggtgtt gcataggatt ctggtaagaa agtttgact aaccataagt	38460
atttgtacta cattaaaaatg aaagctcagg ggccgggcgc ggtggctcac gcctgtaatc	38520
ccagcacttt gggaggccag ggccggcgga tcatgaggtc aggagatcaa gaccatcctg	38580
gccaacatgg tgaaaccccg tctctactaa aaataccaaa aaactagcca ggtgtggtgg	38640
cgggcacctg tagtcccagc tacttgggag gctgaggcag gagaatggcg tgaacccggg	38700
aggcggagct tgcggtgagc cgagatcgtt tcaactgcact cgagcctggg caacagagca	38760
agactccgtc tcacgcaaaa ctctgtctca cgcaagactc cgtctcaaaa aaaaaagag	38820
ttcagggttt atgaaactgg ccagcccgct aaagtgtgct gtgttggttt tgtgcccggg	38880
aggagtgtgg ccagggtgtc acgtcacaca gtacacgttt ctcagatggt ggttctccag	38940
actgctgtcc caaagtctgt ttttgcattt ggttcccaca gaccaccct ccacggtgag	39000
cctgattttg gccagggtag ctggaatctt gcttgtcttt cagcccggca gctgtaccag	39060
tccagggtcc acagctagtg gcttttagga aggaatttgt tcagttggct ttgacacatg	39120
gccccctagg gtccacagct ctgtagtgat gtggatgttg ttatctacaa agacacatga	39180
tccttcgtgt ccagatgaaa gtgatgatgt ctttgcagct gccagcaag gctgtgtgtg	39240
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtg tgggtgtgtg gtggtgtgtg tgtgtgtatg	39300
ggggaggagg gcacccttc catctggggg tgtgtgtgtg tgggtgtgtg gtgtgtgtgt	39360
gcgcgtgtgt gtggtgtgtg gtgtgtgtgt gtgtatgggg gaggcaccct ttccatctgg	39420
gtccaagaga ctgggcctgg ggaagacgct tctttttatc tacttagaga ctttgtttta	39480
tttgattttt tttgagacag ggtctcactc tgtcaccag gctgggggtat ggtgatatga	39540
gcatagctca ctgcagcctc ggccctcccag gctgaagcga tctcccacc tcagccttct	39600
gaatagctgg gactgtaggc gtgcgtcacc atactgagct attgtttttt ttgtttgggt	39660

gggttaattt ttttgatac agatggagtc ttgctatgtt gcccagacta gtctcaaact 39720
 cctgaactca agtgattctc ccacctcagt ttcccgacat tctgggatca caggtgtgag 39780
 ccactgctgt ctccctgttt tattaactgc tgaaagacct agataaagaa agtctgaaaa 39840
 gacttactat cagagcacca tctaagatg attccctctg actcaatgga gagggagggg 39900
 agcttttctt tcaggcctgg gtggcaggag ccagggtgct ccaggcccca tttgccccag 39960
 gccaaatcac tcgggaactt ggatgcagct gtctttcagg gtaacccaaa ggaaccagat 40020
 ccccgaggc agtaggcttc tgggctgtcc tctcctcta cgtcagctca gtaagagccc 40080
 ttcaaggga tgctgtgtcg gagggcccaa aagcccaggc tcatccctga gatgcacagg 40140
 gtgggctggg cttaggcagc gctcgagcat ctctggacg gtgaccccag agagtgtgga 40200
 gacggagagt ccttgagagt cactgagaga cgtggctgcc ctgccttccc aagaggggct 40260
 ctgagtcatt cccacactc acctgcccct acccaccctc acctggcccc cagcctcacc 40320
 tacccccaca tctgtaccga tccctttacc cgcaccttc ctaccaccc tcacctcccc 40380
 tgtaccttca cctccccac tcaccgccc ctgcacctc acctgtcccc caccttcacc 40440
 taacccccac cctcacctgc cctccctca cctggcctcc ttccgttggg gaaggggtg 40500
 taaggggcgg ccccaaaact gtctgtctg gtgcctgca gagaaaacag tacgtgaggg 40560
 ccgcagtcca aaagcttgag tcttgaagg tggaggagac agggatgtgt tgggaagggc 40620
 cccatggtct tggatccctt ctcgactgtc aatggggcct tcatgggagc gccagtctag 40680
 tgatgcacag ctgggtgccc ggcggttggc tgaggaggcc taaagtccga ggcggcaaga 40740
 gctcttccag aggctgttgt cctaactcgt ctggcatact caggcgggca cgtagttagg 40800
 agctgattgg agaggagaga ccccccacacc aatactggga tttgactttc aggctaaact 40860
 tgagaagtgt ggcctctgct gtcctgccag agctctccag ccagtgccca gggctctcca 40920
 gccagtgcc gggggtctcc accagtgcc gggggtctcc gccagtgccca ggggtctccg 40980
 ccagtgccca ggggtctccg ccagtgtca ggagtcttg tttctttgtc ttacagccct 41040
 ttgttttgac ctctctgagc caaggccaaa acccagacag gcagccccac gacctcagca 41100
 tcgacatcta cagccggaca ctgttctgga cgtgcgaggc caccaatacc atcaacgtcc 41160
 acaggctgag cggggaagcc atgggggtgg tgctgcgtgg ggaccgagc aagcccaggg 41220
 ccatcgctgt caacgcggag cgagggtagg aggccaacgg gtgggtgggg gtgctgcccg 41280
 tccaggcgtg cccgcctgt cttatgccga atgccagcct ctacaggct ggggagactt 41340
 tccacctggg gatccaatgg gtggctttcc aggtcccaa aagcaaacac aggtttttca 41400

cagccccgtcc gggaaagcag aaagcccca ggggctggaa ggggaaaggg ggagctctgc 41460
 tgagagggtta caaggcagcg ctggccgacg ggagttgcag ttgatagggt ttgtatcatc 41520
 cttgttaaacc ttgaacctg tgcagaaatc ccttccacgg catgggggct gcctgttgac 41580
 tegctcctgt tccaccacag ggagctcctg ggcttcttcc tcccagaggc ccccgacgct 41640
 cccacctgtt ggtcgtcaga gcttctgggt ggtgggaagg caccagagc cttgaggtct 41700
 ccagagagaa aagccaggga aagagggaga ccgaaacca tgtgacatga aactcaggct 41760
 ccaaactgag cacgggaacg tttggggaca ggagcgcgat ggcttctctc agatagctgg 41820
 ggggctggca tgaagacggg agctacagcc agcacaggtc ctgggcccgg agcccagaga 41880
 ttgagccctg actctgtcac ttactggcca cgtgacctg gccgggtggc atagcctctt 41940
 ggagactcag tttcctcatt ggtaggagt acggccacag tggcgcgcc tctgcagcac 42000
 acggggggct cgggtggcgg aagccccggg tctataaggc ggctgtgcag gagccagccg 42060
 agctggtctc ccaacagcca gggctccggg gtccttagca gctgtggggg gcctgcacct 42120
 gtttcccatg gctgctgtca gaaattacca gaagccagggt ggctgagagt aatggacact 42180
 tgttctctca cagttcctga gggctgaagc ccgagatcga ggtgtgggca gggccctgcg 42240
 ccctctgaag gctctgaggg aacctttggg cttctgggtg ctccaggcac cccttgactt 42300
 gtggtcctgt cactccagtc tctctgtctg gctgcacatg gcgtggcctc ttctgtacca 42360
 ttgaaggaca cttcagttgg atttagggcc taccctcacc cattgtggtc gtatcttgat 42420
 ccttcatgac atttgtaaag accctgcttc caaataagct cacattctga ggttctgggg 42480
 tgagcgggaa tttggagagc attgttcaac tagtatagaa tgtgacctgt cagcctcggg 42540
 cagccctgag aggcaggggc tttccacagc ccagctgggt gccctgggct ccgtgctgtc 42600
 cgaggagacg ccatccccac acccgctctt caccgcccac cctcccgcag gtacctgtac 42660
 ttcaccaaca tgcaggaccg ggcagccaag atcgaacgcg cagccctgga cggcaccgag 42720
 cgcgaggtcc tcttcaccac cggcctcatc cgccctgtgg ccctgggtgg agacaacaca 42780
 ctgggcaagc tggtctgggt ggacgcggac ctgaagcgca ttgagagctg tgacctgtca 42840
 ggtacgcgcc ccggggcctg ccctaaccgc agacaccgg ccttcattgt cagtaatggc 42900
 agcagctgcc acattgtccg agacctgcc tgagcccagt gccgcgccag gggctttgtg 42960
 tgtagcgtgt tttgtctca cactgacagc tgtaggctgg ggttctgagt gagccccaca 43020
 gggcagaggg agaaaatgag tctcagagag ggtgagcgag ctgcttgggg cccacagca 43080
 ggagatggag caggactgca gcctagcctc tgccccagc acctgcgcaa gaagctgctc 43140

tgctctggac tgtgttaggc tgcgagggct ggagagaaat gagagtgggt gcttagagag	43200
ggggcgcagg tccccatggc ttttcctctt atgatgaggt agatgggtga agggaggggc	43260
catgcttgca gggggccagt accgagggcc gccgttgga ctgatggcct tcatcccgag	43320
cccagcccag gtgggagcag ggctttccga gggcttgtct tgggtcggcc tgcttccagg	43380
gactctgctg cagctcccac ccctgtccaa agcatggaat cccccaggct ccctggcagt	43440
cctgtcaacc tctgtcctcc caagctgagt gtggggcaag ttctggaggt cagcactgct	43500
caggggggccc cacgggctgc ttgcaggggc caaccgcctg accctggagg acgccaacat	43560
cgtgcagcct ctgggcctga ccataccttg caagcatctc tactggatcg accgccagca	43620
gcagatgac gagcgtgtgg agaagaccac cggggacaag cggactcgca tccagggccg	43680
tgctgcccac ctactggca tccatgcagt ggaggaagtc agcctggagg agttctgtac	43740
gtgggggctg gcagtggggt gggcaggggt gcctctaaac ccgaccctg gaggaggctg	43800
gaggccagt caagatcctg tgtggcctca gccaggcgggt ggtctctgcc agatgccaac	43860
tgttgccgc tgggggtcag cgacatgtcc gaatgtccg aggcctctga ggttgttttc	43920
ttttgccgca gaacaaatca ccacgaacag cgttttaaga caacaccaac tctttttttt	43980
tttttttttt tgagtcagga tcttgctctg ttgccaggc tggggtgccc tggtgcaaac	44040
acagttcact gcagcctcga cctctgggct taattaagt aacaccttgc ctgagcctcc	44100
caggtagctg ggactacagg tgggcaccac cacacctggc taattttttt ttgtagagac	44160
ggggtttccc catgttgccc aggetgggt gcaactcctg ggcacaagct atctgcctgc	44220
tgtggcctcc caaagtgcta ggattatagg tgtgagccac tggcctgaca acaccacgg	44280
attgtctctc agttctgtaa ggcaaagtcc aggcacagcg tggctcacct gggttctctg	44340
ctcagggtct cacggggcca gaatcaaggt gtcaggaacg ctgggcctc agcggaggct	44400
ctgtggagaa attagcttcc ttgctcactc agcaggtagc agttgtggga tcgaggttct	44460
gttttctctc tggttattgg tcggggacca ctctcagctc ctagaggcca ccacaggtcc	44520
ttgccccgtg gccctctctg cctcagcagt gggggctccc tgcgtcagtc cctcccacac	44580
cttgagtctc tctgatttgc ttctaaagg cctgtgatt cggctcagcc accttagat	44640
taggttagcc tcccctttga tagactocaa gtcggctgat taataacctt aatcacatct	44700
gcagaatccc ttctgccaca taaggtcatt acgccgtgct ggggactggg gtgggaaatt	44760
acggggtcat ttaggattct gcctgccact gccttgctgt gtcccagggc ttgggggagg	44820
ggcctccaca gctgggacca cagtccttcc tcccctccat ggtaaccatc tgaggattac	44880

ttgagaccag cctgggcaac atggtgagaa cccatcccta caaaaaatac aaacaaaaag	44940
ggaccaggct gggcttggtg gctcatgcct ataatcccag cactttggga gaccaagggtg	45000
ggctgatcac ttgaggttgg gagttcgaga ccagcctgcc caacatagtg aaatcccgtc	45060
tctactaaaa atacaaaaat tagctgggtg tgggtggcagg cgctgtatt cccagctact	45120
ggggaggctg aggtgggaga attacttgaa cctgggaggc ggaagttgca gtgagccaaa	45180
attacgccac tgcactccag cctaggcaat agagtgagac tccgtctcaa aaaaaaaaaa	45240
gggccagggg tggtagtgaac aaagagaccc tatcccaaaa aaaccgaaca ctgaatcctt	45300
gagactgagt aaggacactg tgaaatTTTT ctgggtgggg cagggaacag agcgtcttct	45360
gtcatttctt ccacctgggt gtggtcagct ctcctccaa gctgcctcct cttcttctca	45420
ttgtccgggt gttggacaca tttggttaac tggatagaat aacgcgagtt cccagggact	45480
tgggtccattt gctattttat tttattttat tttattttat tttatttatt tatttattta	45540
tttatttatt tattgagatg gagtttcggt tttgtcgccc aggctggagt gcagtggcgc	45600
gatctcggtt cactgcaacc tctgcctccc aggttcaagt gattctccta cctcagcctt	45660
ccaagtaact gggattacag gcacccacca ccataccagg ctaatttttt tgtattttta	45720
gtagagacgg gttttcgcca ttttgcccag gctggtcttc aactcctagc ctcagggtgat	45780
ccacgcacct cggcctccca aagtgcctggg attacaggca tgagccacca cgctggcac	45840
catttgctat ttttaattccc atgtgtatta gtgtcccacg gctgctgtaa caaatgacca	45900
caaactggat ggcttaaagc aacagaaatg gattccccca atgtgctgga gaccagaagc	45960
ctgcgaccaa actggtggga gggctgtgct tcctctgggg gctccaggga ggatctattt	46020
gttggccctt ccagtgcgtg ggggtgccagc gttccacact tgtggatgcg ccgcctcaac	46080
ctctgcccac cttcatgtgt ccactcctt tgtgtctgcg tctttacctt ttcttcttgt	46140
ctgtgttgcc tcttataagg acgtttgtca ttgggtttag ggccaccca aatcatccga	46200
gatgacctcg tcttgagatc cttaacctgc aaagaccctt tttccaaaaa aaggttatgc	46260
tcacagattc taggccttaa gacatgggtg tatctttctg gggggcacta tccaaccctt	46320
tatacaatga aagacgggaa gagggccagg tgtggtagtt cacgcctgta atctcagcac	46380
tttaggaagc tgaagcggga ggatcacttg agcccaggag ttacaagta gctaggcaac	46440
atgatgagac cccatttcta caaaaagtga aaaaaaaaaa aaaaaaaaaa aagccagggtg	46500
tgggtggctca cacctgtaat cccagcactt tgggaggctg aggcaggcag atcacgaggt	46560
caggagattg agaccatcct ggctaacacg gtgaaacccc gtctctacta aaaatacaaaa	46620

aaattatggc cgggcgcagt ggctcccgcc tgtaatccca gcactttggg aggccgaggt	46680
gggtgaatta caaggtcaag agatcgagac catcttggct aacacgggtga aaccccatca	46740
agatcacaag gtcaagagat ggagaccatc ctggctaaca cggtgaaacc cegtctctac	46800
taaaaatata aaaaattagc cgggcatggg agcgggcgcc tgtagtccca gctgctcggg	46860
aggctgagggc aggagaatgg cgtgaacccg ggaggcggag cttgcgggtga gccgagatcg	46920
ctccatgcca ctgcactcca gcctgggtga cagagtgaga ctccgtctca aaaaaaaaaa	46980
aaaaaaaaaa aaaaaagaa aattagccag gcacagtggc aggtgcctat tgtcccagct	47040
acttgggagg ctaaggcagg agaatggcat gaacccggga ggtggagttt gcagtgagcc	47100
gagatcatgc cactgcgctc cagcctgggc gatagagcaa gactctgtct caaaaaaaaaa	47160
agccaggcat ggtggtgcat gcctgtagtc ccagctactc aagaggctga ggcaggaggg	47220
ttgttcgacc cacggagatc aaggctacag tgagccatga tcgcaccact gccctccagc	47280
ctgggtgaca gagtgtgacc ctgtctcaaa gtaagtaaag aggaggagag acaagtgggc	47340
agttcagact gatggtatgg gcacagtaga gactgggtgca gacaggctgg cctgtgatgt	47400
caagcaactt ctgtaattgt ttccggcatc catttgtgtg tcaatttccg tgtcagtagg	47460
aagactctgt aggtgcctaa gaggaataag tgggaggatc ctcccagaga ggccgggcct	47520
gcaggagggc cagttctcat gagttctcat ttggccccta ccctccaggc tgtggttctg	47580
agggtggaga cagagcctga cctctgtttg tcttgttttg tctttgcagc agcccaccca	47640
tgtgcccgtg acaatggtgg ctgctccac atctgtattg ccaagggtga tgggacacca	47700
cgggtgctcat gccagtcca cctcgtgctc ctgcagaacc tgctgacctg tggaggtagg	47760
tgtgacctag gtgctccttt ggggtgatgg acaggtaact gattctctgc ctgctaggct	47820
gctgcctggc atccttttaa aatcacagtc cctgtggcat ccagtttcca aagctgattg	47880
tgtcttcctt tgccctcctt tcttttctac tatgtgcatt cggtgctatg aattttcctc	47940
taagtactgc gtttctgca tctcaciaat tttgttacat ttccattttc aggtagtttg	48000
aatattttta cacttctcct gagatgacat ctttggtcca tgtgttattt agaagtgttg	48060
cttagtttct aaagagttgg ggcttttcca gctgtctctc tgcaactgat ttctaattta	48120
attctactgt agtctgagag cttattttat atgatttctg ttattttaaa tgtgttgggt	48180
gtggtgtttt tgttgttatt gttttgtgt ctttttgttt tgttttgctt cgtttgtttt	48240
gtttttgaga cagtgtcttg ctctgtcact caggctggag tgcaatggcg cgatctcagc	48300
tcaccgcaac ctctgcctcc cgggttcaag tgatcctctt gcctcagcct cctgagtagc	48360

tgggattaca ggtgcacgcc accatacceca gctaattttt gtatttttag tagagacggg	48420
gtttcaccat gttgggcagg ctgggtctga actcctgacc tcgtgatccg cccacctcgg	48480
cctcccaaag tgctgggatt ataggcgtga gccactgtgc ctggccatta ggtgtgtttt	48540
atcaccacgc atcatgcagt ttatcttggg gaatgttctg tgtactcttg aaaagaatgt	48600
ggattctgct gttgttgggt ggagtgttcc agaaacatca attagatcca gttggttaat	48660
agtgtctatc aggttgtctc tacccttcc tctgactgc ctgcttgagc tgtcagttat	48720
tgacaggggt gtggagttct caactctaag ggtggatttg tttatttctc ctagtagttc	48780
tatctttttc tctccttcta ccttgatcc tcttctccc ctagggcttc ctggtgttag	48840
tggtgggaga gtgggtagt gaagaacctg gactttaggg ccaaagaggc cagggttcaa	48900
atcctggctc tgtaacttcc cagttgagtg accctggctg gtgcctgaat ctctgtgagc	48960
ctccacttcc tctctgtga aattgagagc acttacctgg caggctgtca tgggcatcaa	49020
gtaacagggc actccacctg gacctgaca cgtgatgcac aggaatgcc gctgctatgc	49080
catgggtgtg gcagtagtaa taaagtgacc atctgtatcc tcaccacagt gaagcctgtc	49140
cagggctttc tctcctatgc ccccatgcct ccagggtggc ttggatcctg ttggttctgt	49200
gctctgtca gcgaccttcc tcccggtgga gttcctgggg gttcagcttc atcctacaga	49260
cagcagcaca cactggctgt gcacctttt ttttttttt ttttttttt tgagatggag	49320
tctcgtttt ttgcgcagg ctgaagtga gtgggtgat cttggctcac tgcaacctct	49380
acctcctggg ttcaagtgat tttcctgcct caccctcca agtagctggg attacaggct	49440
cccaccacca cgcccggtc atttttgtat tttcagtaga gatgggtgtt caccatgttg	49500
gccaggatgg tcttgaactc ctgacctcag gtgatccgc cacctcagcc tcccaaagt	49560
cagggattac aggcgtgagc caccacacc ggagtgccg ttgttttttag cagtttgtct	49620
tgttcctgga gagactggct cctgcccagg agctcgggga gtagggccgc ggggtgctgc	49680
ctcacacctc gaggttggcc gtaagcagag gggacatttt gtgactgtcc cctcctgag	49740
cttcccagca gcttttctcc aagttacagc ccaaaagctc aggtggattt gcaacccaac	49800
ggtgtctgtg cactccccc tgatgcccga actgccttg ccaagaaacg gggccgtcag	49860
aacgctgcac taactgcagc cttgggcctc catgccagag gccatgcct tccatccacc	49920
acccctggc ctgggcccgt ggccctcctg gctcgggaac tccaggcccc ttcctcacgg	49980
ctcgagagac gtgtatttac cgcacagggt cttgtcatc tcttggtggc tcttctccag	50040
ggagatcaca gaaggacagg gcctcactga ggtctcggac atggaccctt tgatagtggc	50100

aggagccagg ctgggcaaga ggcggccaca gtcacctcag cagtgccatc accaccgcca 50160
 ttcagccctt ccctgagccg ggcgcgcccc tggtctctggc cccagtgtcc cagttacagc 50220
 tcacaggagc ttgtggtgcc cagcggctgc ttctgattga gagtgcaggt cggaggcttt 50280
 gggaggctga gaggtctctc ggtttcacia ctgctgaggg agacttgggc tccatctcag 50340
 gtatgcccc a tctgccttc aacctccagc caccggtcct cctgtgtccc catggccagg 50400
 caggcttgc agacatctgt cgttggctcc tctcagccgt cgtgggctga cctggcacg 50460
 tctctctgtg gctgagccca gtggggacag ctgcttctt ttattacct agaactctcg 50520
 tctttgatca ggccccctcc cctatgccac acagtccttg tctctgggt gagcccagta 50580
 gtcattggga aggcctgcgg gttccaaaca tccaaaggct tgcgtgcagc atgacagctt 50640
 gaaaccgatg ttttttacct tgatcagatt tcagcttggc gggggctttg ctcagctttc 50700
 agtgaggcct gggccgattt cccagcatcc cctcctgagg ccagcctctg tttcctgtga 50760
 ttttctgcac aaagtgggag ggaggagtcc taggaaatgg ggggccacct cgaagcctag 50820
 gcctcctctg gcttctctgt gccagtgcgc ccacgctttg tgtctgtgtc cccagcccat 50880
 gggactctgc tattccctga gtgctgccgc atgccagcc cgcactgagg acgtggagcc 50940
 ccgaggggca ggatggctc catggtcaca cgtaggaagt ggctccacc ctccgatgat 51000
 cctctccctc ctccctttca gcgcctccc cgggggtgtc ctcagccctc ctgcctgtgc 51060
 tttgtccgt cttctgcagg cgctgggac gtgctgacag gtctctgcc ggctcctgcc 51120
 ttgctatgcg cacgtggtc accacagagg cctggccctt cttctgtagc agtcccacac 51180
 ccgcaacagg tgtggctgct gaccacctgc tttctgcccc tctggctctg aggagggcgc 51240
 agtgggcact caggcgtggc tgagcagatg tgtgttgccg ggaggaggaa ggactgctcc 51300
 agtcagggt gaatttccca cccggagcat ttctgctgta tttggtgtag cgcctgctgc 51360
 ttaaagctct gattcccagt tggcaccctt tcccttctgc attgaaaaac atacggatgc 51420
 atgtcttctt gcagtgaatg tgtattctcc cagcctctct tctgggttg ggctggagg 51480
 ggagcggcac acaggagccg cagcgatgga ggatgtgcgg gtgcagcacc ccgtacagca 51540
 gggatgccaa acccgctgc agtccctctc aacttctgct ttgaagccca gtcacgcat 51600
 tgctgggtt ttgctgggc gggctgcgtg tgatgttctc ctctgtccct cccccagagc 51660
 cgccacactg cccccggac cagtttgcac gtgccacagg ggagatcgac tgtatccccg 51720
 gggcctggcg ctgtgacggc tttcccagat gcgatgacca gagcgacgag gagggtgctc 51780
 ccgtgtgtc cgccgcccag tccccctgc gcgggggtca gtgtgtggac ctgcgctgc 51840

gctgcgacgg cgaggcagac tgtcaggacc gctcagacga ggcggactgt gacggtgagg	51900
ccctccccgt caaggtcttg ccaagacctt ggcctgccc tccgggatac gagcttggg	51960
ctgcctccgg cctcacagga gtaggggtc tgaaaacctt tgcttgagg gagattgcca	52020
agtctgtctt ttaggccccaa caaggaaaac tctgcagttc caccatcct gtcccaccag	52080
gtagtgtggc ttgaaggcag actgtgaggg tctatctcac cttcctgcat taggtcagga	52140
gtttcacaga aacctgaggc acattcaggg gtgggtgca gaggtccatg gctcacacc	52200
tggaaaatcc gccccaaaa gacagtgtg tctccactga ccagtcttg ggatagtgt	52260
taagcctgag tggtttctat caacatgtag aatcaggagg tataaagaga ttgtctcagg	52320
catcctgggc cctctctgac cagcaggatc ttcctttaga tcttgacagt gaaacacatc	52380
tcttctgtgc ccctgtgag ttttctttca ttcattcatt cattcattca ttcattcatt	52440
cattcattcg agacagagtc ttgctctgtc acccaggctg gaggccctg gtgtaatctc	52500
ggctcactgc aacctctgcc tccagggttc aatcgattct cctgcctcag cctcccgagt	52560
agctgggatg acagggtgcg accaccatgc ctggctaatt tttgtatttt tagtagagac	52620
agggtttcac catgttgccc aggtgtgtc cgaactcctg acctcagggtg atccgcccgc	52680
ctcagcctcc caaagtgtg ggattacagg catgagccac cgcgcccggc ctgagttttc	52740
cttttatgaa ggacctgctt ggttggttgc ctgccacatg ttgtcagcac catgggccc	52800
ggactgctga ggagctgttg atgccctgc tctcccagag ccaccggctc tgtagataa	52860
ttcacatgca gtctggccac tgctcctacgt cctcattcac aaagagcaga catttcgtag	52920
aagatgaggg cctgggagta acctccctgc atgtttttct ataaaggcat agtggttaag	52980
tccttcacgc tcattgacca ttggagaatt ttatggaggc tgtagactag gggctggtaa	53040
actaagggcc caggggcaa atccagcctg ccacctactt ttgtaaataa agttttcttg	53100
gtgcacagcc atgcccattc attcatttgc acaatgtctg tggctgcttt catgcaaaa	53160
gcaagagaac tgagtggta tgctggagac ctacggcctt caaagcccca gacctcacgt	53220
ctggcccttg acagacagag cttccccagc cctgtctgcg atcctggccc agcatgtgt	53280
gtgtgtgtga tttcagcttg caggagccgt ggttaggaat tgcctctgtg ttggtccatt	53340
ttgcattgct atgaaggagc acctgaggcc gggtagatta tgaaggaaag aggtctgtct	53400
ggctcatggt tctgtaggca gcaccagtat ggcacccgca tctgtcagc ttctagttag	53460
gtctcaggaa gctttgactc atggtgaaag tcgaagcggg agcaggtgca tcacatggtg	53520
agagagggag caacggagag agagagagag cgcctctccc tcttgccctc accttgagag	53580

gagatgccag gctcctttaa gtaaccagct cccatgtgaa ctcacagtga gagcccattt	53640
gctactgagg agagggcacc aggcattctgc tcccatgacc caaacactgc ccaccaggcc	53700
ctacctccaa ccttggggtc atattttatt ctgttctatg ctatgctatg ctatgccatg	53760
ccatgccatg ccatgctatt cctattctat tatttgagac agaattctgc tctgttgccc	53820
aggctggagt gcagtggcat gatcttggt cactgcaacc tccacctccc aggttcaagc	53880
gattctectg tateagctc ccgagtagct gggattacag gcacacacca ccacaccagg	53940
ctaatttttg tattttcaat agagatgggg ttccaccatg ttggccaggc tgggtctaaa	54000
ctcctggcct caagtgatcc acctacctgc gcctcccaaa gtgccatgat tacagatgtg	54060
agtcactgag cccagtgagg gtcacatttc cgttgagatt tggaggggca gacgttgagg	54120
ccatctgagc cccctcgtcc cgctctagct tctcctcccg tgtgccccgc ggtgctgggtg	54180
gcaggccctt acgcgggttc tggctgcatg ctctgttcca gaagctttct tccctgcttg	54240
gttaccagaa aatcatccca tccattacaa ggacagggtc cccttatctc ccattcccag	54300
ggcaggacac cgggggcagg gcagggtggg aactgagcaa gttctctggg ggcaggcgtg	54360
gctatggctc cctctgggtg ggcgtctggg gaggggtgga ggcagccgtc agcgccctgg	54420
cttgcctctc ctccctggcc agagactgtg gccttgctgt gctcccgtgt gggctgcctg	54480
cacctccagt gggttgtgt cctccccctc cctccccctc aagctctgtg gagcaccact	54540
gccttccaca gccccactc tcgggaggcg aggcctctcg tggccattcc tgtccttggc	54600
accaccccc ccaccaacct ggtagagcct tgggcgggggt ctgttactcc ttgcatggcg	54660
tagacctccc cacagtaggc acctgacaca tacctcctgg ggggcaggca ggaggtgcgt	54720
tgaggtctca gccctggcag tccctcccct gcgtggcata ggctcgcga cagggtcatc	54780
gaggggtgggt ggagactgta ctagaccact ccccgctggt cctagaaagg gtcccatctg	54840
tctgctctct gtttgagtc cagaccttg ttgctgtgcc ctgcatgggt ggctgggggg	54900
cacctccag cctctctgag tgcattggct ctccttgag ccattctgct gcccaaccag	54960
ttccggtgtg cgagcggcca gtgtgtctc atcaaacagc agtgcgactc cttccccgac	55020
tgtatcgagc gctccgacga gctcatgtgt ggtgagccag cttctggcac ggggaagggg	55080
cgtccgggct gggttcccc aggaacgtgg agtttagggg aggagacgtg cctttccagc	55140
ggggctgggg gctgtgtggg agactcaggc ggctgggagg ctccttgagg gaggcaggga	55200
agcctttccc agggcagcgg ccaggaggac agactgtgag ctgtgggctc ggcggctaca	55260
gagctctgct cagtgggcgg ggctgatggt gtccagggtc ctgcagcacg caccaccca	55320

cgggaccttg ctgagcagcg tctgtcaggc agcaagatta cccgagggct gcagtgggtcc	55380
tgttccctgg cagcttactg tctggctgag gaggagtgat gttcacatat gcacacatgt	55440
catgtgcaca cacatgtaca tgacaacatc ccacatgctc ctcaaatagc atgacctgta	55500
cagtcacgga tatagggcct aggggatagg aggccaagac agtcagggaa gactttccag	55560
aggcagtggc tectgaaagg ctgtctgatt caggcaggaa gggagctgag ttcagatagg	55620
aagtagcaat gagtcattgt gtctggggac atggccactc ctctgctgca gagggacctg	55680
ggctgagagc tectctctta tggctgcagt cgggagagaa gtctgttggg gggagaaggg	55740
ggcttctca agggactccc tgtgcccttt ggcaccttcg tgccagggtca ggcttgaggc	55800
ctgaaggcag tgggtggggc caccaagggt cgctctctct gctgggcaag tccccagttc	55860
gacgggcctg tgccgtgggc cccagctgtg ggggcgctgt tgatgcgcag ccaggcctcg	55920
ccgccagagc ccgcacgctt ccattccgct gacttcctcg acgccctcag gatcgctggg	55980
ccggccctgt gggagagtga atgtggcttt tgccaaagt gagtctggag cctggaaact	56040
tccctatggg cagccttgat agtggagtgg cccaaggagc ccacccagcc gacctgccc	56100
ctcccgtggc tgggtgggcg caccaggggc tgccctggctt tgctcgttca ccaacatcac	56160
ctgggctggc cagggcgcgc tcaattctgc caccaccgag ggcctgggc gaaggagtga	56220
ataccaggct gccttggcag ggatgtgttg agggctgttg ggagtcggac agcggcgggg	56280
gtcagaggag gaggaggtg caccgtgcag gctgaagggc cacgttaccc tgaggttggc	56340
caggctcccc aggcctagcc tcccagctcc cccactttct cccaccctc caccagtggc	56400
aaagccagcc ccttcagggc gcacggtgtc tgcccccaag gagggcccat tccgttgggg	56460
ttaatgttgg ccacctcttt ctgtttgtct ctggcagaaa tcaccaagcc gccctcagac	56520
gacagcccgg cccacagcag tgccatcggg cccgtcattg gcatcatcct ctctctcttc	56580
gtcatgggtg gtgtctatct tgtgtgccag cgcgtggtgt gccagcgcta tgcgggggccc	56640
aacgggccct tcccgcacga gtatgtcagc gggacccgc acgtgccct caatttcata	56700
gccccgggcg gttcccagca tggccccctc acaggtaagg agcctgagat atggaatgat	56760
ctggaggagg caggagagta gtctgggcag ctttggggag tggagcaggg atgtgctacc	56820
ccaggccctc ttgcacatgt ggcagacatt gctaactgat cacagcatc agcctttccc	56880
actgagcctg tgcttggcat cagaatcctt caacacagag gcctgcatgg ctgtagcaac	56940
ccaccctttg gcactgtagg tgtggagaaa gtccttgga cttgacctc atattctagt	57000
aggacatgtg ctgtgttgtc cacaaatcct catgtaccct agaaatgaat gtgggggcgg	57060

ctgggctctc tccagagctg aaggaatcac tctgtaccat acagcagctt tgtcttgagt	57120
gcagctggga tttgtggctg agcagttaca attcctacgt ggcccaggca ccaggaacgc	57180
aggctgtgtt tgtagatggc tgggcagccg caccgcagag ctgcaccatg ctggtttgta	57240
tcacatgggt gaccatggta tgtctaagaa ggtggagtcc ctgtgaggtc tgcagggtgcc	57300
cccacagctc caggccacct tgaggattgc ctctgcctgc ccageccctga gttccctctc	57360
ccctgtcctg tcccactgtc accccaagcc ggccctattg ggagccctgt ggatggcagg	57420
gtatagatgt aacctgattc tctctgggga gcggggttat ctggcttctc aagagctcct	57480
aggagcccac agtgggtggca ccatcacagt cgcagcagcc ccagagaaac gcggccctgt	57540
ctgttcctgg cgtgctctgt gctgccccgc ctgggttccc tgccccagtc gcaggccctt	57600
tggaggaggt accatgtgtc tcccgtttca cagatgagcc ccggggagct cactctagta	57660
gtggccagag aggcctgcgg ctccaggagc ggggcacatt tccaacagga cacaccgccc	57720
tggctctgagt ctctgtggta gtgggagcag aggagagcgc cctatgtctg tggggcggct	57780
tggctgagcc tggaaagccac ctgacctccc ccgtcccttc cctgccaggc atcgcatgcg	57840
gaaagtccat gatgagctcc gtgagcctga tggggggccg gggcgggggtg cccctctacg	57900
accggaacca cgtcacaggg gcctcgtcca gcagctcgtc cagcacgaag gccacgctgt	57960
accgcgccgt gaggggcggg gccggggagg ggcggggcgg gatggggctg tgggcccctc	58020
ccaccgtcag tgctggccac cggaggcttc ccgggttccct gggggctgtg ccaccgcctc	58080
tgaggcatgc ttgctttctt cccctttcaa acccttctgc ttccttcttt aatgacattg	58140
ttgattgtgg ataacttgaa aactacacaa aaatataaag agccaaaatc tcacccaaat	58200
ccacctcta gagtggctgt tgggctccgt cagcatccag gcggccgtct gtgttccgca	58260
cggcccagcc catcgatagc cgctgcacc aggcctgtct gccctctgtg agcctcccca	58320
cagggttccc tccacaaaca ccctgttctc ccaccaggg ctggctgctt cctggaaaac	58380
agctggatgg ttttgtgcat gacagacaaa cacagggtga ttttcgtggc taaaatactc	58440
cctggagctt ttggcagggt gaggggctgg ctccagctga gccacgcctt gagtgaatg	58500
actgtgagga gaataaactg ccgctgccct ccaggatcac tggggctggc tggggagaac	58560
ccccgtttct gggagcacag tcccaggatg ccaaggcgag cttggtgccg agatgtgaac	58620
tcctgagtgt aaacagcggg ggctgacttg acatgctttg tatgcttttc atttgttcc	58680
gcagctgtat gcccctaagg tgagtccagc ccccttctgc ttcctctggg gcctcgccag	58740
tgagccccac cttgctgggg ctggttcttc ctgcccttct gggtatccct cacatctggg	58800

gtcttgtctt cttgttttct ttttcttttt tttttgagac ggagttttcac ttttgttgcc	58860
caggcttcag tgcaatggtg tgatctctag gctcaccgca acctctgcct cccaggttca	58920
agcagttccc ctgcctcagc ctccctagta gctgggatta caggcatgtg ccaccacgcc	58980
cagctaattt tgtattttta gtagagatgg ggtttctcca tgttggtcag gctgatcttg	59040
aactccctac ctgaggtgat ccgcccacct tggcctccca aagtgctggg attacaggcg	59100
tgagccaccg cacctggcct ttttcttttc ttttcttttc ttttttctga gacagggctt	59160
cgctctgtca cccaggctgg agtgcaatgg tgtcatcatg gctaactgca gcctctacct	59220
tctaggtcga agcaatcctc ccatctcagc ccctaagtag ctaggactgc acgcatgcat	59280
ccccatgccc agctaataatt tacatttttt gtagagatga agtttacta tattgcccag	59340
gctggctctc aactcctgga ctgagcgat cctcctgcct cggcctcccc aggtgctggg	59400
attacaggcg tgagccaccg tgccctggcct ggggtattgt cttcttatgg cacctgactg	59460
tggtgggccc tgggaaggaa gtagcagaag agggttcttc ttggtttcct ggacagtaac	59520
tgagtgttct ggaggcccca gggcctggct ttgtttaggg acaaaggga ctggtaacca	59580
gaagccgaga gtttaaaccac ccactgcctt tcttccctgc tctgctgct gcaaccacg	59640
ttaaccagcc aggagtgcta ggaacccaag caggggcccc gagcacacag caggcagctc	59700
acgaattctc ttttctgtt ctcccttggg agctgggagg atcttaatca ggcaataaga	59760
gatggcactg agcagccagc taatttttta aatcacttta ttgtttaacc atatgactca	59820
cccacttaaa aaagggtaca gttcagtggg ttttagtgta ttcacagatg tgtgcaaccc	59880
tcaccacagt taattttaga acattttcct gcccctaaaa gaaactctgc atgaagccag	59940
ctgtttttta attagcaaag ttattttgca tcctttaaat atatgttcat ggtacaaaat	60000
tcaaaagata cagaagagtc tgcagtccaa agagactccg ccccatgac gccaagcagg	60060
catccctggg aggcattggc tcctgcagtg tgtttcttct atgtcccccc aggggtcatc	60120
tgtacatatg caagcataca agagcgtgga ctttgttttc caagccagaa gataattgta	60180
gatttatgtg cagttgtgag aaagagcaca gaccattta tcctctgcct ggtttcccc	60240
agtgtgcct gccatcttgc atgacttcca ttctatcat aagcaagaca ctgataacga	60300
ttctttcacc ttattcagat tgacataagt gttttttgtt tgttcttgag acaaacttcc	60360
tctgtcacc agtgggagtg cagtggcaca atcacagctc actgcagcct caaactcctg	60420
ggctcaagcg attctctgc ctgagctccc tcaagtagct cagatggcag gtgtgcacca	60480
tcagccagg ctaattttta aattttttgt ggaggtgagg cctcaactaaa tttcctgggc	60540

tagtcttgaa ctctgagct aaagtgatcc tcttgccca gctcccaaa gtggtaggat	60600
tacaggcatg agccactgcg cctgggctga catatgtgtt ttcgtaagcc cgaaagatag	60660
catctgaaga gtcaacattg agccttgcc tttgctgcta acgatgtata aaagtgtctg	60720
ttctgagcat ttcggaggct cccagctgcc gtgtgcaccc tgcctagagc tctaccgtaa	60780
cccatctccg ggaggagggtg ctattgtttt cctcattttg caacaaggag gctgaagaac	60840
tgagcatgaa cactggcct gggctgttcg gttggtaggc agtggggcca ggccatccaa	60900
ctcacaacca cttctactc tgcctccccc gcacctgaa gtttgttctg ttttgaggac	60960
acagccgtca cattcttggg ggctgaacag cactccttgt caggcgtggc tgggccccca	61020
ctggagggca tcatggctct ctctctgct gcggttgaa cttggctgtt tcaaccactc	61080
ctgccaagtg gccctctgaa agggacagtc catcttttct cagcagaggg ccacactggc	61140
aaaacggctc ctggcaccct ttctctccac ctgtctaata tagagtaaaa atggtatcat	61200
gttaagatct tcatttatat ttattttatc atgaatgatg taagcatcat tttgtgtgtt	61260
taagaacctt tgggcccagc gtgatggctt gcagctgtaa tctcagcact ttaggaggct	61320
gagatgagcg gatcacttga ggccgggagt ttgagaccag cctggccaac atggagaaac	61380
cccgtctcta gtaaaaattt aaaaattagc cgggtatggg gatcccagct acttgggagt	61440
ctgaagcatg agaattgctt gaacatggga ggcggagggt gcagtgagcc gagatcgcg	61500
cattgcactc cagcctgggc gacagagcga gactctgtct caaaaaaaaa aaaaaaaaaa	61560
aaaagaaaag aaattatcaa tctctcttt tatggcatat atatatatat atatatatat	61620
atatatatat atatatatat tttttttttg gttatgttca gaaaggcctt cctgctctg	61680
atcataaaaa acaacttatt ttcacactct ctctcttttt tttttgagac agagttttgc	61740
tctgttgcc caggctggag tgcagtggcg caatctcagc tcaactgtaac ctccgectcc	61800
cgggttgag tgattctct gccttacctt cccgagtagc tgggattata ggcatgcacc	61860
accatgctg gctaattttg tacttttagt agagacgggg gtttctccat gttggtcagg	61920
ctggctctga actcgcgacc tcaggtgatc caccacctc ggctcccaa agtgctggga	61980
ttacagacgt gagccacat gccagccca cactctcttt cttaacgtcc tctctcttc	62040
gttttacgtt cacatcttta attctcttg gatgtaatta gatttgatga gcaagggtggg	62100
catccagctt gtttcttggc tgatggctta tgggtggcgt gaattagtcg gggctctatca	62160
ggaggcagaa actctatgag aatttgaaca gagaaagttc cgtctacagg cttattacca	62220
gggactggaa tagcagaaat tgaacagtga gatgtacaga gaactctaag aatgcaggaa	62280

taggccaggc atggtggctc acacctgtca tcccagcact ttgggagacc aaggcgggtg	62340
gatcacctga ggtcaggagt tgcagaccag cctggccaac atagtgaaac cccatctcta	62400
ctaaaaatac aaaaaaatta gctgggtgtg gtggcgcatg cctgtaatcc cagctactcg	62460
ggaggctgag gcaggagaat cacttgaacc tgggaggcag aggttgcagt gagccgagat	62520
catgccactg tactccagcc tgggtggaag agcggaaactc tgtctgaaaa aaaaaaaaaa	62580
aacaagaagt tcaacttgaa gggaaaaatg ccgtattgtc tttccctttg ttatgtcacc	62640
agggcacagt ccatcccagg ctggcgctga tccacgggct ggagaggggc tgccccagaa	62700
gaggacatgc caggaagggc ttggctggtg ttcaggagcc caggccaggt caggtcaaga	62760
ggtgttgagg ctggacggga gaggccagct aggggctcat gtaggatatg aggggtcggc	62820
ccatttcaac gtggaaactg agctcttctg cttctctttc ttcttactg cattaagatt	62880
caataccgct tgggaagcag gtatttccct tcctataaag gatggttggg agcctgagtg	62940
ttgggagaaa gtgtagccgc tgagttacta acaactaggg ctgccgtcaa gcctatgggg	63000
aaagagagaa gaggacattt ggaaggagag agatcaagct gtggcaccct gggagaggac	63060
cacagaaaag aggccagtga gggggttccc cggtggcatc tgaagggtg gccaaccag	63120
gaggtccaga ggctgccagc cgagtggccc aggagagggg acctcacagg ggctgagtgg	63180
gaccaagcc ctatccaccg tcctaaccac ccacatttct cggaacaag acctcccaca	63240
gtggcctccc cggcagtgga aatagccaaa ctggcaacat ggactttctt caactgcccg	63300
ggcgatgctg cctcagtgcc ccagggcagg caggaagctc ccacacccat tctggaatga	63360
ggggttgagg gaaggctgag ctgagcaaag gacccatctc tgctctggtt ggtggggagg	63420
gagccatta tacaagagac ccctcagggc tcagtgaggg gtgacagaga cttggggagt	63480
agtggctgtc actgcagagg tgagaggggt tggagagaag gtacatgcct ttttggccac	63540
attgagtagc acctggtagc cagttagtaa cgtgtattgg ataaacaaaa gattaaacgg	63600
atgcaaaaaa aaatgttggc tttgcttctt tttacccaaa cctcagttcc ctcaagtaga	63660
ttctgggaac accccctacc tggtggact gttgtgaagt ttaaataagc cagggttaact	63720
tcacctctc cttaagaca cagctcagac actgcctcct ccaagaagcc ccctctggct	63780
tcctgtgtga atatgacggc cctctgggct ctagggtatc ttagaacaat gcttccttat	63840
ggctttggaa ccccgctgtc tcctggattg ggagcaaag caggggagga gccacacctg	63900
actaatctct gggctctcca gcacataagt ggcataaggg cagggtgtg cccgcttcag	63960
gcacttactg aaggatgtac ttggcagagg gtaggcagcc ggcggatgag cccctcactc	64020

tccccagctg actgcgtggg cgggaaaggc ggggttcagga gaccagcct cctgggctg	64080
tcaccacctc tgcacatcca gccccattga tcaagggttc aatttttggg gtccgtgttg	64140
gaggccagga gactctctcc aggcacttct tccaggtctt tgtgttaggg tgtgtgtgtg	64200
tgtgtgtgtg tgtgtgtgtg tgtgtgtgtt gttttatattt atttatttat ttatttat	64260
atttatttat ttatttat ttgagacgcag tctcgctctg ttgcccagggt tggagggtgg	64320
tggcatgac tcggctcact gcaagctccg cctcccgggt tcacgccatt ctctgcctc	64380
actcttctg agtagccgga ttacaggcgc acgcaccatg cctggctaata tattttgttt	64440
ttttagtaga gacagggttt cgccacgttg cccaggctgg tcttgaatcc ctggcctcaa	64500
gcgatccgcc cgctcagcc tcccaaagtg ctgggattac aggcgtgagc caccgtgccc	64560
gccagccta ggggtacatg aaactttttt tttttttttt ttgagacaga gtttcactct	64620
gtcctcaggc tggagtgcag tggcgtgac tcggcgtact gcaatctccg cctcccgggt	64680
caagcgattc tctgcctca gcctcccag tagctgggat tgcaggcacg cgccaccaca	64740
cccagctaata ttttgtattt ttagtagaga cgggctttca ccatgtggga caggatggtc	64800
tcgatctct gacctcgtga tccgcccgc tcagcctccg aaagtgctgg gattacaggc	64860
ctgagccacc gtgcccagcc atgatgtttt gatacaggca tataacgtat aataatcaca	64920
tcagggtaaa tgatgtaacc atcacatcaa gcatttatcc tttgtgttac aaaaaaaat	64980
ctaattatac tttcctactt attctttttt tttttttttt ttgagacgga gtctccctca	65040
gtcggccagg ctggagtgc gttggcatgat ctcagttcac tgcaagctct gcctcctagc	65100
tctgcctcct ggggtcatgc cattctctg tctcagcctc gcgagtagct gggactacag	65160
gcgcctgcca ccgtgcccgc ctaatttttt tttttgtatt tttggtagag acagggtttc	65220
accgtgttag ccaggatggc ctgatctcc tgacctcata atccgcccgt ctggcctcc	65280
caaagtgtg ggattacagg catgagccac cgccccagc ctatttatc ttaaatgtac	65340
aataaattat tgttgactcc agtcacctg ctgtgctacc aaatacggat cttcttcatt	65400
ctatctaact gtattttctg acctgttaac catctctct ccacctcacc ccccaaacc	65460
actacccttc tcagcctctg gtaaccatcc ttctactctc tatctctatg agttcaattg	65520
tattaatttt tagtccccg gccgggcacg gtggctcacg cctgtaatcc cagcacttca	65580
ggaggctgag gcagggtgat cacgagggtca ggagtttgag accagcctgg ccaacatgg	65640
ggaaccccat ctctactaaa aacacaaaaa ttagctgggc gtgggtgggtg gcgctttag	65700
tcccagctac ttgggaggct gaggcaggag aatcgcttga aactgggagg cagagggtgc	65760

agtgagccaa gattgcgcca ctgcactcca gtctgggtga cagagtaaga ttccatcccc 65820
 aaaaaaaaaa agtttagctc ccacaaataa gtgagaacac gtgaagtttc tttttctgtg 65880
 cctcgcttgt ttcacttaac ataatgacct ccagttccat ccacgttgtt gctttgttat 65940
 aaatgacagg atcttggtca ggcgcagtgg ctcatgcctg taatcccagc actttgggag 66000
 gctgaggtgg actgatcatg aggtcaagag atcgagacca tcctggctaa cacagtgaag 66060
 ccccgctctc actaaaaata caagaaatta gccgggctg gtgggtggga ccattttccg 66120
 ccccttctcg ggacgtgat gcacgacata ttacccatcc ccggaagact aatcctcccc 66180
 cactctatat tgtacctctt cttttctcct ccacgcgatt ccccgagtaa cccgtcttcc 66240
 ctccctctc ggattacgt cacttttccg cttcaatcac gttgctcctt ccccttcccc 66300
 attcgtaaca ctctcactt tcgtcttctt accccacta tccttttctg tcctctctat 66360
 tccttactta ctctcccc ttctcttcat acttcattcc ctccgctctt cccactcgcg 66420
 ctcccacttt cacttagttg cctcaccta cgttgccatc tcgcccctt ttcagctctc 66480
 ggctctcac ccatctgtc ttctctttac ctctctctc atctcgtca gacatctctc 66540
 tagactatcc ctcactttac cttctcagtc gtcttcttcc tatccttctg tctccatgat 66600
 cttcacgtcg ccatctcttt tcgcccctt catatgtctc tcttcattgt ctcactatca 66660
 ttctcatgat cactatcgtt ctcaactact atcaactccc tttttcttca tcaattcctc 66720
 tcgctattc tcgtctctct cttacaaccg ccttcttgt gctatctaac tcaacctgc 66780
 ctctctact ctctctctat cgcctctcca tcgcttatgc atcctcttct attgcacacc 66840
 cgcctctcca tcgcttatgc atcctcttct attgcacacc gccctccat cgcttatgca 66900
 tcctcttcta ttgcacatcc tttctattg cac 66933

<210> 12

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 12

ctgagcggaa ttcgtgagac c

<210> 13

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 13

ttggtctcac gtattccgct cga

23

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 14

ctcgagaatt ctggatcctc

20

<210> 15

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 15

ttgaggatcc agaattctcg ag

22

<210> 16

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 16

tgtatgcgaa ttcgctgcgc g

21

<210> 17

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 17

ttcgcgcagc gaattcgcat aca

23

<210> 18

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 18

gtccactgaa ttctcagtga g

21

<210> 19

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 19

ttgtcactga gaattcagtg gac

23

<210> 20

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 20

gaatccgaat tcttggtcag c

21

<210> 21

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 21

ttgctgacca ggaattcgga ttc

23

<210> 22

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 22

cuacuacuac uactgagcgg aattcgtgag acc

33

<210> 23

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 23

cuacuacuac uactcgagaa ttctggatcc tc

32

<210> 24

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 24

cuacuacuac uatgtatgcg aattcgctgc gcg

33

<210> 25

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 25

cuacuacuac uagtccactg aattctcagt gag

33

<210> 26

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 26

cuacuacuac uagaatccga attcctggtc agc

33

<210> 27

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 27

aactggaaga attcgcggcc gcaggaattt tttttttttt ttttt

45

<210> 28

<211> 13

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 28

aattcggcac gag

13

<210> 29

<211> 9

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 29

ctcgtgccg

9

<210> 30

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 30

gtacgacggc cagt

14

<210> 31

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 31

aacagctatg accatg

16

<210> 32

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 32

ccaagttctg agaagtcc

18

<210> 33

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 33

aatacctgaa accatacctg

20

<210> 34

<211> 57

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 34
agctgctcgt agctgtctct ccctggatca cgggtacatg tactggacag actgggt 57

<210> 35

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 35
tgagacgccc ggattgagcg ggcagggata gcttattccc tgtgccgcat tacggc 56

<210> 36

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 36
agctgctcgt agctgtctct ccctgga 27

<210> 37

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 37
gccgtaatgc ggcacagga ataagct 27

<210> 38

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 38

gagaggctat atccctgggc

20

<210> 39

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial sequence is a primer.

<400> 39

acagcacgtg tttaaagggg

20

<210> 40

<211> 163

<212> DNA

<213> Homo sapiens

<400> 40

actaaagcgc cgccgccgcg ccatggagcc cgagtgaagt cggcgccggc cgtccggcc
gccggacaac atggaggcag ctccgcccg gcccgcgtgg ccgctgctgc tgctgctgct
gctgctgctg gcgctgtgct gctgcccgcc ccccgccgcg gcc

60

120

163

<210> 41

<211> 419

<212> DNA

<213> Homo sapiens

<400> 41

gccccacagc ctgcgcgtc ctgctatctt ccaaccgcgc ggacgtacgg ctggtggacg
ccggcggagt caagctggag tccaccatcg tggtcagcgg cctggaggat gcggccgcag
tggacttcca gttttccaag ggagccgtgt actggacaga cgtgagcgag gaggccatca
agcagacctc cctgaaccag acggggggccg ccgtgcagaa cgtgggtcatc tccggcctgg
tctctcccga cggcctcgcc tgcgactggg tgggcaagaa gctgtactgg acggactcag
agaccaaccg catcgagggt gccaacctca atggcacatc ccggaagggt ctcttctggc
aggaccttga ccagccgagg gccatcgcc tggacccgcg tcacgggtaa accctgctg

60

120

180

240

300

360

419

<210> 42

<211> 221

<212> DNA

<213> Homo sapiens

<400> 42

ccccgtcaca	ggtacatgta	ctggacagac	tggggtgaga	cgccccggat	tgagcgggca	60
gggatggatg	gcagcaccgc	gaagatcatt	gtggactcgg	acatttactg	gcccattgga	120
ctgaccatcg	acctggagga	gcagaagctc	tactgggctg	acgccaagct	cagcttcac	180
caccgtgcc	acctggacgg	ctcgttcgg	taggtacca	c		221

<210> 43

<211> 221

<212> DNA

<213> Homo sapiens

<400> 43

tccctgactg	caggcagaag	gtggtggagg	gcagcctgac	gcaccccttc	gccctgacgc	60
tctccgggga	cactctgtac	tggacagact	ggcagaccgc	ctccatccat	gcctgcaaca	120
agcgactgg	ggggaagagg	aaggagatcc	tgagtgcct	atactaccc	atggacatcc	180
aggtgctgag	ccaggagcgg	cagccttttt	gtgagtgcg	g		221

<210> 44

<211> 156

<212> DNA

<213> Homo sapiens

<400> 44

tttctcagtc	cacactcgct	gtgaggagga	caatggcggc	tggtcccacc	tgtgcctgct	60
gtccccaagc	gagccttttt	acacatgcgc	ctgccccacg	ggtgtgcaga	tgaggacaa	120
cggcaggacg	tgtaaggcag	gtgaggcgg	gggacg			156

<210> 45

<211> 416

<212> DNA

<213> Homo sapiens

<400> 45

ctccacagga	gccgaggagg	tgctgctgct	ggccccggcg	acggacctac	ggaggatctc	60
gctggacacg	ccggacttca	ccgacatcgt	gctgcagggtg	gacgacatcc	ggcacgccat	120
tgccatcgac	tacgaccgc	tagagggcta	tgtctactgg	acagatgacg	aggtgcgggc	180
catccgcagg	gcgtacctgg	acgggtctgg	ggcgagacg	ctggtcaaca	ccgagatcaa	240

cgaccccgat	ggcatcgcg	tcgactgggt	ggcccgaac	ctctactgga	ccgacacggg	300
cacggaccgc	atcgagggtga	cgcgcctcaa	cggcacctcc	cgcaagatcc	tgggtgtcgga	360
ggacctggac	gagccccgag	ccatcgcact	gcaccccggtg	atggggtaag	acgggc	416

<210> 46

<211> 198

<212> DNA

<213> Homo sapiens

<400> 46

ttctttctcca	gcctcatgta	ctggacagac	tggggagaga	accctaaaat	cgagtgtgcc	60
aacttgatg	ggcaggagcg	gcgtgtgctg	gtcaatgcct	ccctcgggtg	gcccacggc	120
ctggccctgg	acctgcagga	ggggaagctc	tactggggag	acgccaagac	agacaagatc	180
gaggtgaggg	tcctgtgg					198

<210> 47

<211> 244

<212> DNA

<213> Homo sapiens

<400> 47

ccgtcctgca	ggtgatcaat	gttgatggga	cgaagaggcg	gaccctcctg	gaggacaagc	60
tcccgacat	tttcgggttc	acgctgctgg	gggacttcat	ctactggact	gactggcagc	120
gccgcagcat	cgagcgggtg	cacaagggtca	aggccagccg	ggacgtcatc	attgaccagc	180
tgcccgacct	gatggggctc	aaagctgtga	atgtggccaa	ggtcgtcggg	gagtcggggg	240
ggtc						244

<210> 48

<211> 313

<212> DNA

<213> Homo sapiens

<400> 48

gttcgcttcc	aggaaccaac	ccgtgtgctg	acaggaacgg	ggggtgcagc	cacctgtgct	60
tctgcacacc	ccacgcaacc	cgggtgtggct	gccccatcgg	cctggagctg	ctgagtgcaca	120
tgaagacctg	catcgtgcct	gaggcctttt	tggctcttcac	cagcagagcc	gccatccaca	180
ggatctccct	cgagaccaat	aacaacgacg	tggccatccc	gtcacggggc	gtcaaggagg	240
cctcagccct	ggactttgat	gtgtccaaca	accacatcta	ctggacagac	gtcagcctga	300
aggtagcgtg	ggc					313

<210> 49

<211> 255

<212> DNA

<213> Homo sapiens

<400> 49

cctgctgcca	gaccatcagc	cgcgcccttca	tgaacgggag	ctcgggtggag	cacgtgggtgg	60
agtttggcct	tgactacccc	gagggcatgg	ccgttgactg	gatgggcaag	aacctctact	120
gggccgacac	tgggaccaac	agaatcgaag	tggcgcggtg	ggacgggcag	ttccggcaag	180
tcctcgtgtg	gagggacttg	gacaaccgga	ggtcgctggc	cctggatccc	accaaggggt	240
aagtgtttgc	ctgtc					255

<210> 50

<211> 210

<212> DNA

<213> Homo sapiens

<400> 50

gtgccttcca	gctacatcta	ctggaccgag	tggggcggca	agccgaggat	cgtgcggggc	60
ttcatggacg	ggaccaactg	catgacgctg	gtggacaagg	tgggccgggc	caacgacctc	120
accattgact	acgctgacca	gcgcctctac	tggaccgacc	tggacaccaa	catgatcgag	180
tcgtccaaca	tgctgggtga	gggccgggct				210

<210> 51

<211> 352

<212> DNA

<213> Homo sapiens

<400> 51

gtgttcattg	aggtcaggag	cgggctcgtg	ttgccgacga	tctcccgcac	ccgttcgggtc	60
tgacgcagta	cagcgattat	atctactgga	cagactggaa	tctgcacagc	attgagcggg	120
ccgacaagac	tagcggcccg	aaccgcaccc	tcattccagg	ccacctggac	ttcgtgatgg	180
acatcctggt	gttccactcc	tcccgcacag	atggcctcaa	tgactgtatg	cacaacaacg	240
ggcagtgtgg	gcagctgtgc	cttgccatcc	ccggcggcca	ccgctgcggc	tgcgccctcac	300
actacaccct	ggaccccagc	agccgcaact	gcagccgtaa	gtgcctcatg	gt	352

<210> 52

<211> 225

<212> DNA

<213> Homo sapiens

<400> 52

gcctcctcta	cgcccaccac	cttcttgctg	ttcagccaga	aatctgccat	cagtcgggatg	60
atcccgagcg	accagcacag	cccggatctc	atcctgcccc	tgcattggact	gaggaaacgtc	120
aaagccatcg	actatgaccc	actggacaag	ttcatctact	gggtgggatgg	gcgccagaac	180
atcaagcgag	ccaaggacga	cgggacccag	gcaggtgccc	tgtgg		225

<210> 53

<211> 235

<212> DNA

<213> Homo sapiens

<400> 53

ctttgtctta	cagccctttg	ttttgacctc	tctgagccaa	ggccaaaacc	cagacaggca	60
gccccacgac	ctcagcatcg	acatctacag	ccggacactg	ttctggacgt	gcgaggccac	120
caataccatc	aacgtccaca	ggctgagcgg	ggaagccatg	ggggtggtgc	tgcgtgggga	180
ccgcgacaag	cccagggcca	tcgtcgtcaa	cgcggagcga	gggtaggagg	ccaac	235

<210> 54

<211> 218

<212> DNA

<213> Homo sapiens

<400> 54

ccaccctccc	gcaggtacct	gtacttcacc	aacatgcagg	accgggcagc	caagatcgaa	60
cgcgcagccc	tggacggcac	cgagcgcgag	gtcctcttca	ccaccggcct	catccgccct	120
gtggccctgg	tgggtggaaa	cacactgggc	aagctgttct	gggtggacgc	ggacctgaag	180
cgcattgaga	gctgtgacct	gtcaggtacg	cgcctccg			218

<210> 55

<211> 234

<212> DNA

<213> Homo sapiens

<400> 55

ggctgcttgc	aggggccaac	cgctgaccc	tggaggacgc	caacatcgtg	cagcctctgg	60
gcctgaccat	ccttggcaag	catctctact	ggatcgaccg	ccagcagcag	atgatcgagc	120
gtgtggagaa	gaccaccggg	gacaagcgga	ctcgcatcca	gggccgtgtc	gcccacctca	180
ctggcatcca	tgcagtggag	gaagtcagcc	tggaggagtt	ctgtacgtgg	gggc	234

<210> 56

<211> 157

<212> DNA

<213> Homo sapiens

<400> 56

ttgtctttgc	agcagcccac	ccatgtgccc	gtgacaatgg	tggctgctcc	cacatctgta	60
ttgccaaagg	tgatgggaca	ccacgggtgt	catgcccagt	ccacctcgtg	ctcctgcaga	120
acctgctgac	ctgtggaggt	aggtgtgacc	taggtgc			157

<210> 57

<211> 272

<212> DNA

<213> Homo sapiens

<400> 57

gttctcctct	gtccctcccc	cagagccgcc	cacctgctcc	ccggaccagt	ttgcatgtgc	60
cacaggggag	atcgactgta	tccccggggc	ctggcgctgt	gacggctttc	ccgagtgcga	120
tgaccagagc	gacgaggagg	gctgccccgt	gtgctccgcc	gcccagttcc	cctgcgcgcg	180
gggtcagtgt	gtggacctgc	gcctgcgctg	cgacggcgag	gcagactgtc	aggaccgctc	240
agacgaggtg	gactgtgacg	gtgaggccct	cc			272

<210> 58

<211> 134

<212> DNA

<213> Homo sapiens

<400> 58

tctccttgca	gccatctgcc	tgcccaacca	gttccggtgt	gcgagcggcc	agtgtgtcct	60
catcaaacag	cagtgcgact	ccttccccga	ctgtatcgac	ggctccgacg	agctcatgtg	120
tggtgagcca	gctt					134

<210> 59

<211> 274

<212> DNA

<213> Homo sapiens

<400> 59

gtttgtctct	ggcagaaatc	accaagccgc	cctcagacga	cagcccggcc	cacagcagtg	60
ccatcgggcc	cgtcattggc	atcctcctct	ctctcttcgt	catgggtggg	gtctatattg	120
tgtgccagcg	cgtggtgtgc	cagcgctatg	cggggggcaa	cgggcccttc	ccgcacgagt	180
atgtcagcgg	gaccccgcac	gtgccccctc	atttcatagc	cccggggcgg	tcccagcatg	240
gccccctcac	aggtaaggag	cctgagatat	ggaa			274

<210> 60

<211> 164

<212> DNA

<213> Homo sapiens

<400> 60

cttccctgcc	aggcatcgca	tgccgaaagt	ccatgatgag	ctccgtgagc	ctgatggggg	60
gccggggcgg	ggtgccccct	tacgaccgga	accacgtcac	aggggcctcg	tccagcagct	120

cgtccagcac gaaggccacg ctgtacccgc cggtagggg cggg

164

<210> 61

<211> 130

<212> DNA

<213> Homo sapiens

<400> 61

ttggctctcc	tcagatcctg	aaccgcgcgc	cctccccggc	cacggacccc	tcctgtaca	60
acatggacat	gttctactct	tcaaacattc	cggccactgc	gagaccgtac	aggtaggaca	120
ccccctgcag						130

<210> 62

<211> 496

<212> DNA

<213> Homo sapiens

<400> 62

tcaaacattc	cggccactgc	gagaccgtac	aggccctaca	tcattcgagg	aatggcgccc	60
ccgacgacgc	cctgcagcac	cgacgtgtgt	gacagcgact	acagcgccag	ccgctggaag	120
gccagcaagt	actacctgga	tttgaactcg	gactcagacc	cctatccacc	cccaccacg	180
ccccacagcc	agtacctgtc	ggcggaggac	agctgcccgc	cctcgcccgc	caccgagagg	240
agctacttcc	atctcttccc	gccccctccg	tccccctgca	cggactcatc	ctgacctcgg	300
ccggggccact	ctggcttctc	tgtgccccctg	taaatagttt	taaatatgaa	caaagaaaaa	360
aatatatattt	atgattttaa	aaataaatat	aattgggatt	ttaaaaacat	gagaaatgtg	420
aactgtgatg	gggtgggcag	ggctgggaga	actttgtaca	gtggagaaat	atttataaac	480
ttaattttgt	aaaaca					496